THE VICTORIAN ERA SERIES

LONDON (1837-1897)

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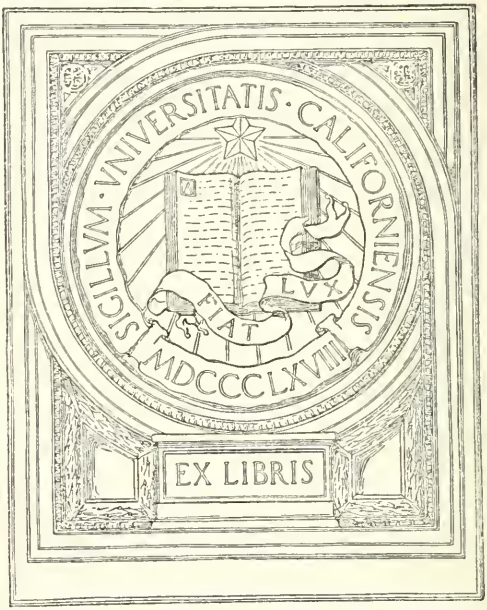

THE GIFT OF
MAY TREAT MORRISON
IN MEMORY OF
ALEXANDER F MORRISON

The Victorian Era Series

London

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London

In the Reign of Victoria

(1837–1897)

UNIVERSITY OF CALIFORNIA

By

G. Laurence Gomme, F.S.A. etc.

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Preface

Occupied as I have been in London matters all my life, I confess I did not think that the writing of this book would have been so difficult as I have found it to be. The material is so enormous and so scattered, so interesting and so varied, so surprisingly fascinating as one realizes that it relates to a single community, and that community having for its living place the capital of the British Empire, that it is enough to render diffident any student who is endowed with a sense of proportion.

As it is, I have not produced the book I had intended, when first I undertook the task, at the request of my friend Mr. Holland Rose. But if it is another book, I still hope it will be found a useful one. That it will be considered adequate I dare not even hope. I might have done so much in other directions and have left undone so much that I have accomplished, will be everyone's opinion. Still, after a deal of consideration, I resolved to represent the London of Queen Victoria's reign as a London struggling to become worthy of her place. That is all she really is. Bad as things were in 1837—and I think I have shown this sufficiently—bright and delightful as much of London life is, beautiful as London is, there is nothing yet which can be said to be in any way complete. Every country glories in its capital city, helps to make it beautiful, attractive, and prosperous. In Britain only has the capital to struggle on without help, almost, it might be said, with opposition. And so London is only a struggling

GIFT OF MRS. A. F. MORRISON MAR 27 '18

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London after all. If every citizen of hers would help a little, a few years would see great things, and I am not without hope that I may see such help freely and lovingly given.

I am indebted to various authorities for the information I have brought together in this volume, and I believe in every case I have made proper acknowledgment. Many of the reports published by the London County Council have been used largely in getting together some of the principal facts. Some of these reports are those prepared by myself as Statistical Officer of the Council; others are those prepared by my colleagues. Among these latter are Mr. Spencer's valuable report on Markets, used in Chapter iv., Mrs. Basil Holmes' report on Burial-grounds, used in Chapter vii., and Dr. Garnett's exceedingly valuable reports for the Technical Education Board of the County Council, used in Chapter ix. The information summarized from these sources is not to be found elsewhere, and I have no hesitation in acknowledging my indebtedness thereto.

As editor of the series, Mr. Holland Rose has taken much more than ordinary interest in this book, at least, so it appears to me, and I have to thank him for assistance as generously given as it has been valuable. Also to my friend Mr. T. Fairman Ordish, I have to tender my most cordial acknowledgment in the reading of my proofs.

Whatever drawbacks may be found in this book, they are not due to my friends; whatever good there is in it is hopefully placed at the disposal of those who love London.

24 Dorset Square,
September, 1898.

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London.

Chapter I.

The London of 1837.

The picture of London in 1837 is not easy to draw. In everything almost it was a different place from that which we now know. It was the City of London and the suburbs of the City of London; it was not, as it is now, the county of London, grown up from the area surrounding the ancient city bounds. Many of our great towns in other parts of the United Kingdom, with their outstretching suburbs, might afford us an idea of what the London of 1837 was in its general aspect; but we should have to introduce the one element which London of all English cities alone possesses, namely, the throbbing life which proclaims it to be, by unquestioned right, the capital of the empire. Other towns dispute for the second place among British cities, but there is no dispute for first place, and all Englishmen, whether inhabitants of the great city or not, agree in their expressed admiration of its wondrous position.

In going back for more than half a century one is struck by the many indications in prose and also in verse—not always indifferent verse—of the admiration with which London was regarded. We get the same sort of admiration in modern days, but only occasionally expressed and only by people specially interested. But in both cases it is curious

to observe what little attention is paid to the actual meaning of the term London. In the early period, down to 1888 indeed, the term London was, properly speaking, only applicable to the ancient city, the square mile from the Tower to Temple Bar. All the rest of the area alluded to as London was an indeterminate collection of small places, governing themselves to a great extent by virtue of a long series of local acts, and to a further extent by general acts relating to Sewer Commissions and to the Board of Works created in 1855. The places in this way included in the term London differed according to each speaker's meaning and intention, but the conglomerate had no existence either in history or law. In 1888 the term London was for the first time properly and legally applicable to an area of some 120 square miles centring round the ancient city; but on the other hand, the enthusiasm of the earlier people for a London that did not exist seems to have been largely mixed with expressions of mistrust and dislike for a London that does exist. The old enthusiasm, however, must reawaken. It is not dead. It is but temporarily diverted by a few people who have not been able to grasp the greatness of the capital city of the empire.

Retrospects are always pleasing when progress and development have to be chronicled. And the retrospect of London to the beginning of the Queen's reign certainly presents a vista which has all the charm of enormous distance to render it pleasing to the modern student. I shall not try to describe this either generally or in detail, but certain aspects of London history are peculiar to the Victorian era, and these will be made the subject-matter by which the Queen's London will be presented to the reader.

The present area of London was in 1837 only beginning to grow into shape, even if it had actually begun. The ancient site of the city was then, as

now, covered with houses partly used for occupation, principally for commercial purposes. Within the city area there was a population of 123,000 persons, principally congregating in Cripplegate, Aldersgate, Bishopsgate, Aldgate, Newgate, Smithfield, Holborn, Blackfriars, and St. Bride, all of them parishes on the boundary. This population had slightly decreased since the beginning of the century, owing to expansion from the centre, but the great exodus had not then begun. This, indeed, did not begin until 1861, and then it went on rapidly, the resident population of the city sinking down to 75,000 in 1871, and 31,000 in 1896. These include caretakers, porters, hotel and restaurant servants, and the lower industrial class, so that there is really very little actual residence in the city. A few of the clergy of St. Paul's Cathedral and other churches, bank managers, and the few residents in Finsbury constitute all that is left of the once wealthy and numerous residential population of the city.

The district which has now grown into the county of London outside the City bounds was in 1837 very sparsely covered with houses. The development had begun on the west, the Strand district, Westminster, St. Giles, and St. James' being very largely built over, while Holborn and Clerkenwell to the north, Shoreditch, Whitechapel, and St. George's to the east, Southwark and North Lambeth to the south, were also nearly built over. Along the great roads, north, east, south, and west, residences were being built upon estates whose owners were only then obtaining acts of parliament to allow them to lease their lands. The map of London in 1837 is indeed more like a great octopus than anything else. The body consisted of an area whose boundary began approximately at Vauxhall Bridge and proceeded thence to

Sloane Square, by Sloane Street, Park Lane, Edgeware Road south of the Regent's Canal, Marylebone Road, City Road, then bending southwards to about the site of the commercial gas-works at Mile End, reaching the Thames at Shadwell Basin. On the south, Greenwich and Deptford in independent existence joined St. Olave and Southwark as part of the central city, extending with the river about as far as the Walworth Road to Nine Elms. This area was about six miles from west to east, and from two to four miles from north to south. Allen computed the whole to comprehend about nine square miles (Allen, *Hist. of London*, iii. 2), but this, I think, is somewhat too small to represent the London house area of 1837. The outstretching limbs were the great roads from the city, along which villa residences were built and which remain to this day in testimony of the general topography of 1837. These roads no longer stand isolated amidst green fields. The space they inclosed has been built upon, and the 9 square miles of 1837 has grown to the 120 square miles of to-day.

Such are the general facts which indicate the configuration of London in 1837. For my present purpose I wish, however, to bring under notice some of the conditions of life in London at that date. Contemporary histories of London and of the several parishes which now constitute the present London contain a few interesting facts which, when pieced together, give a fair idea of the starting-point in 1837 from which the London of 1897 has developed. London consisted of practically six divisions. The City, the chief centre of trade and commerce; Spitalfields, the chief seat of the silk manufacturers; Whitechapel, of sugar refiners; Southwark, extending along the Thames to Vauxhall, the seat of manufactures of various kinds, tanneries, iron-foundries, glass-works, dye-works,

shoe and hat manufactories, breweries, and distilleries; the eastern division, devoted to shipbuilding, and the docks and warehouses for import and export purposes; the western division, extending from Temple Bar to Knightsbridge, contained the royal palaces, the residences of some of the nobility, the Houses of Parliament, Courts of Justice, Government Offices, &c.; the north-western division, which, with its newly-built squares and streets, was the most fashionable part of London; the northern division, extending to the recently-erected districts of Pentonville and Somers Town, constituted the middle-class residential portion.

These divisions had on their borders the more or less rural parishes of Chelsea, Fulham, Hammersmith, and Kensington on the west; Paddington, St. Marylebone, Hampstead, St. Pancras, and Islington on the north; Stoke Newington and Hackney on the north-east; Bow and Bromley on the east; Plumstead, Woolwich, Kidbrooke, Eltham, and Charlton on the south-east; Lewisham, Camberwell, Penge, and Lambeth on the south; and Clapham, Wandsworth, Tooting, Streatham, and Battersea on the south-west. These parishes are now part of the county of London, connected by continuous lines of buildings with the central divisions, and the rural character of any portion of London proper has departed for ever.

The reign of George IV. had witnessed considerable changes in the western portions of London, the Regent's district, as it might be called; and it is curious to read the extraordinary raptures with which these changes were greeted. The miserable Georgian architecture was received with unstinted praise and delight. Old houses and narrow streets gave way to wider streets and newer houses, built after the "Grecian" style, as it was fondly called, and London was supposed to have been rebuilt.

Books of "illustrated London" are devoted to these unhappy specimens of renovated London, while they leave all the beauties of ancient London, the old buildings in the centre and the old villages in the outer parts, unrecorded by the artist's pen.

In the literature of the day the expansion of London is always alluded to as a thing of marvellous, if not ominous, import. Ever since Queen Elizabeth's days the growth of London had been watched with a certain amount of fear. At the commencement of the reign of her great successor the same feeling prevailed in certain quarters. Fenimore Cooper, who was in London in 1828, has left us his impression of the growth of London about this period, which is worth quoting. "As we drove along the long maze of villages that are fast getting to be incorporated with London itself, my mind was insensibly led to ruminations on the growth of this huge capital, its influence on the nation and the civilized world, its origin and destinies." He then describes how a connection of his had purchased a small property in the vicinity of London in order to give his children the benefit of country air, and when in 1826 the great novelist was invited to dine with these English relations he found himself in the midst of streets built upon the property of the original owner, whose grandson was then in possession of some fifteen to twenty thousand pounds per annum. "Many", he says, "think the place already too large for the kingdom", and he records that Mr. M^cAdam considers the size of London an evil. (*England*, iii. 67–70.) Mr. M^cAdam, whose opinion is thus recorded, was the great road contractor.

There were thus two Londons in 1837—the London expanding from the centre, with its life, its pleasures, its business, and all the characteristics of a great city; and the London, rural in character,

which was gradually being encroached upon and absorbed in order finally to form the one London of 1897.

I will first endeavour to give an account of the inner London—an account, not of its history, but of its condition; not of its topography, but of its life—something to show of what materials this great city is composed.

The City was, of course, absorbed in its commercial pursuits. It was the chief port of the kingdom. The old trading monopoly of the East India Company had ceased with the renewal of its charter in 1814, and the new trading co-operative system had not arisen. Trade was in the hands of individual British merchants. The banks even were individual concerns, not joint-stock companies, although even then, as Mr. Rothschild said in 1832, "this country is in general the bank for the whole world. I mean that all transactions in India, in China, in Germany, in Russia, and in the whole world are all guided here, and settled through this country." In Lombard Street there were Barclay, Bevan, Tritton, & Co.; Barnetts, Hoare, & Co.; Bosanquet, Anderson, & Co.; Cunliffe, Brooks, & Co.; Esdaile, Greenfell, Thomas, & Co.; Denison, Hayward, Kennard, & Co.; John Feltham & Co.; Glyn, Halifax, Mills, & Co.; Hanbury, Taylor, & Lloyds; Roberts, Curtis, & Co.; Smith, Payn, & Smith; Stevenson & Salt; Stone, Martin, & Stone; Vere, Sapte, Banbury, & Co.; Whitmore, Wells, & Whitmore; and Willis, Percival, & Co. In Cornhill were Barnard, Dimsdale, & Co.; Currie & Co.; Fuller & Co.; and Ladbroke, Kingscote, & Gillman. In Abchurch Lane were Brown, Janson, & Co. In Bucklersbury were Cunliffe & Roger, and the Middlesex County Bank. In Princes Street were Drewitt & Fowler. In Lothbury were Jones, Lloyd, & Co. In Fenchurch Street, Hanbury & Co.

In New Broad Street were G. F. Kinloch & Sons. In Mansion House Street were Lubbock, Forster, Clarke, & Co. In Threadneedle Street, Prescott, Grote, & Co. In King William Street, Price, Marryat, & Co. In Nicholas Lane were Masterman, Peters, Mildred, & Co. In St. Paul's Churchyard were Paget, Bainbridge, & Co. In Gracechurch Street were Spooner, Attswood, & Co. In Birchin Lane were Williams, Deacon, Labouchere, & Co.; and in West Smithfield, Jones & Son.

Outside the city there were Child & Co., and Snow, Strahan, & Paul, at Temple Bar; Dixon, Brooks, & Dixon, in Chancery Lane; Goslings & Sharpe, and Hoare & Co., in Fleet Street; Snows, Coutts, and Twinings, in the Strand; Cocks & Biddulph, and H. & G. Drummond, at Charing Cross; Cockburn & Co., at Whitehall; Bouverie, Norman, & Murdoch, in the Haymarket; Sir W. P. Call, Marten, & Co., in Old Bond Street; Hammersley & Clarke, and Ransom & Co., in Pall Mall; Herries, Farquhar, & Co., in St. James' Street; Hopkinson, Barton, & Co., in Regent Street; and Sir Claude Scott & Co., in Cavendish Square.

The one joint-stock company amidst all this wealth of well-known private bankers was the London and Westminster Bank, whose head offices were in Throgmorton Street, City, and who had a branch office in Waterloo Place. The jealousy and opposition which the rise of this bank caused among the directors of the Bank of England was the form which the protest against the coming state of things took at this time. But the protest was hardly needed. The businesses of merchants and bankers, and every form of industrial enterprise, were based upon individual effort and individual management, and this single example of the joint-stock company did no more in its early days than to foreshadow what would be the development of the future.

The trade with the port of London in 1837 was officially returned at the following totals of vessels entering the port:—

	Number.	Tonnage.
British vessels	4,079	821,788
Foreign vessels	1,547	240,135
Coasters	21,322	2,911,736
	26,948	3,973,659

that is to say, about one-third of the present trade of the port. Below London Bridge were the docks (all except the Victoria Docks, which were not built until 1850), wharves, legal quays, and private moorings. Above London Bridge, all the way to Westminster Bridge, except a few spots occupied by private gardens, were wharves chiefly for wood and coal. Coal was then brought only by water. There were usually about 150 colliers in the river discharging their cargoes, and from 350 to 400 barges carrying the coal up the river to the different wharves. Now much of this is changed. Most of the coal is brought by railway, and the Thames is freed from what might have grown into an intolerable nuisance.

Fenimore Cooper's description of the Thames will help us to realize the former condition of the river. "When full", he says, "it is a river of respectable depth and of some width; but at low water above London Bridge it is little more than a rivulet flowing amid banks of slimy mud. The wherries in use are well adapted to their work in this part of the river, but lower down they are not sufficiently protected against the waves. The banks of the Thames above Westminster Bridge are quite pretty, and above Chelsea, where the river flows

through fields, they may be said to be even more; the villas on the shore, the windings of the current, and the meadows raising them almost to positive beauty. Within the town itself warehouses blackened by coal smoke, manufactories, timber-yards, building and graving docks, and watermen's stairs principally line the shores. There are no magnificent quays, the shipping taking in and discharging by means of lighters, except in the wet-docks, of which, however, there are now nearly sufficient to accommodate all the shipping of the port that is engaged in foreign trade. Much of the trade has gone to the outports, particularly to Liverpool. With the commerce of the river much of its life and peculiarities, it seems to me, have departed. The costumes have disappeared; the watermen have a less jolly manner, and even Jack wears the bell-mouthed trousers no longer. We passed the Temple Gardens and one or two more belonging to private dwellings, before we got to Blackfriars, after which no signs of vegetation were visible. We landed at London Bridge, and inspected the Boar's Head in East Cheap."

It is interesting to compare this with Von Raumer's description in 1835. In writing his charming letters home to Germany we have the following passage:—

"From Tilbury to Woolwich the banks of the Thames are bare, from Woolwich to Greenwich there are increasing signs of industry and cultivation; until on arriving at the Docks, you are borne along on absolute forests of ships. Compared with this, anything of the kind that I have ever seen at Havre, Bordeaux, or Marseilles, is like a single room cut out of this immeasurable palace. It is true that here, as in Paris, the buildings are, at first sight, in no respect striking; but their very peculiarities show a definite practical aim which distinguishes them from ordinary buildings, and

gives them an interest of their own. If, however, the predominancy of mere utility and convenience, to the neglect of all considerations of beauty, be objected to English architecture, this crowd of ships is so far more striking and important a feature in the view, that all those of the land appear insignificant. Here one sees that London is the real capital of the world; not Paris,—spite of the pretensions of its journalists and coteries, Paris is more pre-eminently the Town, Germany the Country, but London alone is entitled to talk of being the World."

But all this river inspection by the two distinguished travellers was accomplished by means of a rowed skiff. There were then no penny steam-boats. In 1837 this was altered. Little steamers ran up in summer as far as Richmond and Twickenham, and down to Greenwich and Woolwich. Each steamer could carry 500 passengers. The fares were 6*d.* to Greenwich, 1*s.* to Woolwich, and 4*d.* to Westminster.

Of the manufactures the most ancient was perhaps that of silk weaving in the district of Spitalfields. In 1837 competition at Coventry, Manchester, Derby, Paisley, and other places had set in, and the weekly wages to operatives had been reduced, according to Dr. Kay, who inspected and reported upon the district in April 1837, from £10,000 or £12,000 per week to half that amount, and out of 14,000 looms one-third were altogether disused and the remainder but partially employed. A weaver had generally two looms, one for himself and one for his wife, while in some families there were four looms. The weaver earned about twenty-five shillings per week on the best looms, and from eight to ten shillings on inferior looms. The district had become squalid and miserable to a degree, and Dr. Kay's report is anything but pleasant reading. It had been invaded by the

poorest workers from the docks and by the casual population of London, and this character it retains to the present day, though my friend Mr. Holland Rose informs me that a few old weavers still work on at their looms as survivals from the older state of things.

Bermondsey and Rotherhithe abounded in tanneries, tenter-grounds, glue and soap manufactories, ropewalks, brimstone and saltpetre works, &c. Bermondsey was not closely built upon, for the manufactures required considerable space, and the pungent odours prevented residence in the district except by those who were obliged to live near their work. Bermondsey Street was occupied by woolstaplers, hair merchants, leather manufacturers, curriers, vinegar manufacturers, and drysalters. Off this street were the tanneries. Tooley Street was occupied with wharfingers, hop and cider merchants, potato merchants, &c. The straw-hat manufacture was also extensively carried on in Southwark, and to some extent at Wandsworth.

Lambeth had increased rapidly from about 1810 to 1837, and the manufacture of machinery, earthenware, tiles, &c., was extensively carried on in the northern or riverside portion of that parish.

The northern districts were not engaged in special manufactures, except perhaps the watch-making of Clerkenwell, but were occupied by the principal retail businesses.

The number of shops in London was estimated at some 60,000, of which 8500 were engaged in the supply of food, 5000 in liquors, 8000 in clothing, 800 to 1000 in coal, 3000 in the building trades, 4500 in the supply of household furniture, and the remainder in the general departments of commerce, bookselling, science and art dealing, and the professions. Paternoster Row, then as now, was the home of booksellers, Lombard Street of bankers,

Long Acre of coachbuilders, Cranbourn Street was occupied by straw-hat makers, Holywell Street was occupied by second-hand clothes shops and a few booksellers, Bedfordbury was almost wholly inhabited by woollen drapers, tailors'-piece brokers, and trimming sellers, Tottenham Court Road was then much the same kind of market as it is now, and New Cut in Lambeth was a remarkable sight on a Saturday evening, being occupied by butchers, bakers, pork dealers, old-clothes men and itinerant dealers in hot potatoes.

But the retail businesses were moving to the west end. Ludgate Hill had been the famous emporium for shopping, and it was the chief seat of the silk-mercers (who displayed Indian shawls, French cambrics, Brussels lace), printsellers, booksellers, and jewellers, of the last of which the most famous was the firm of Rendell and Bridges. Fenimore Cooper describes this shop in glowing terms "as the first jewellers and goldsmiths in the world", and then goes on to explain that England has probably more plate than all the rest of Europe united. The shop was large, but it made a wholesale and affluent appearance rather than the brilliant show to be met with in Paris. "You can have", he says, "no just notion of the affluence of the shops of London generally in the article of plate. Gold, silver gilt, and silver vessels are literally piled in their vast windows from the bottoms to the summits as if space were the only thing desirable. I have seen single windows in which it struck me the simple metallic wealth was greater in amount than the value of the entire stock of our heaviest silversmith." Some of the best of these retail firms are still extant. Meeking's in Holborn (now Wallis), Swan and Edgar, Rogers and Hitchcock, Curtis and Harvey are well-known examples. Arcades had come into vogue, and the Lowther Arcade in the Strand, the Burling-

ton Arcade in Piccadilly, and the Pantechnicon in Pimlico, which seems to have been a sort of forerunner of the modern stores, were all in existence, and very popular. Of bazaars there was one in Soho Square, one in Baker Street, and the Pantheon in Oxford Street. The quadrant in Regent Street had the colonnade extended all round, thus giving the shops the appearance of a sort of arcade. Regent Street, Oxford Street, and Bond Street had already assumed most of the characteristics by which we now know them, and except for the difference in costume of the throng of customers and pedestrians, and in the articles exhibited for sale, this part of London would appear much the same as it does now. Von Raumer, writing in 1835, tells us that the shops did not seem to him to surpass those of Paris in elegance and taste; but the prodigious quantities of goods collected there made them appear what they were, storehouses of the world; and he adds, "The inscriptions and bills in shop-windows sometimes allude to the measures of government. Thus a tea-dealer assures his customers that he will never have anything to do with 'the miserable stuff called free-trade tea'—that is, contraband tea."

The markets of London were in 1837 far more useful to the public than they are at present. They did not consist of covered buildings and sanitary arrangements as we see to-day, and Smithfield was an open space of land covered with hurdles. But they were more the people's markets. There were Mark Lane for grain, Smithfield for live stock, Billingsgate for fish, Covent Garden for vegetables and fruit, Newgate and Leadenhall for meat and vegetables; Newport Market near Leicester Square was divided into wholesale and retail markets; Hungerford Market, where the Charing Cross Railway-station now stands, entered from the Strand,

was a general market; Aldgate was the market of the Whitechapel butchers; Spitalfields was a vegetable market; then there were Farringdon Market, a market not far from Finsbury Square, Clare Market in Lincoln's Inn Fields, Portman Market, Carnaby Market, Oxford-Street Market, near the Circus, Cumberland Market, near Regent's Park, and the still existent Shepherd's Market to the west of Berkeley Square. The Borough Market in Southwark was, of course, the chief market of South London for vegetables. In 1837 the Islington Cattle Market was for sale, having proved a complete failure. Bloomsbury market, which was established in 1674, was never a success, and was destroyed in 1852, when New Oxford Street was formed.

In the way of hotels for the reception of travellers and visitors London could boast in 1837 some 430 houses of more or less importance. These included about thirty so-called fashionable hotels, of which Mivart's in Brooke Street and in Davies Street, Warren's in Regent Street, Fenton's in St. James' Street, Limmer's in George Street, Hanover Square, the Clarendon in New Bond Street and in Albemarle Street, the Burlington in Old Burlington Street, and Wright's in Dover Street, Piccadilly, were considered the best. Some of these names are familiar to us now. But they are not the first hotels of London any longer. The rise during the past thirty years of one hotel after another, each larger and more luxurious than its predecessor, is one of the new features of London. Besides these hotels, however, were the commercial inns and the mail-coach inns, of which I propose to give a list presently. The gin-palace had, however, also begun to disfigure the streets. In all there were about 4000 licensed houses in London, not a great number compared with the population and the requirements,

and indeed less than had existed a century or so before, when in 1750 a Committee of the House of Commons had investigated the matter and reported a most terrible condition of things. Many of the licensed houses of those days were chiefly supported by supplying malt liquors to resident families for their ordinary daily consumption, a practice which only exists now in the poorest neighbourhoods. They were also chop-houses, and it was a common practice for those who worked away from home to purchase a steak or chop and have it cooked for them at some neighbouring public-house, for which a small charge of a halfpenny was usually made. Still, the growth of the gin-palace "fitted up with spring doors, plate-glass, mahogany or rose wood" (*England and America*, 1833, i. 61) was a noticeable innovation, and a bad one; and its continued growth in modern days has assumed proportions which do not tell either for the comfort or picturesqueness of the extra-home life of the people.

When we turn from this to the outer edge of London there is a considerable change in the class of events to be recorded—inner London was engaged in making money, those who lived at its gates were engaged in spending money. The City turned out of its one square mile of territory a vast hard-working class who went east and north and south to their homes of comfort or of squalor, and a smaller class who went westwards to mingle, as far as they might be allowed, with the aristocracy who yearly came up to their residences in the capital. Everyone knows Thackeray's description of the Sedleys and the Osbornes of Russell Square in the beginning of the century. If this description was true of the period for which it is nominally intended, namely, from 1810 to 1830, it was true of 1837, for it was from the later life that Thackeray in reality obtained the spirit of the whole magnificent word-painting.

Still, the universal practice of living away from the place of business which now almost perforce obtains, was not absolutely general at the commencement of the reign. Thus George Augustus Sala, writing of his early life, says:—

"One house to which I was often taken when my mother gave her lessons (music) was a handsome mansion, splendidly furnished, in Great Russell Street, Bloomsbury, close, if indeed not immediately contiguous, to Meux brewery at the south-eastern corner of Tottenham Court Road, and it was to the female members of the family of Sir Henry Meux that my mother gave vocal instruction. Imagine a wealthy brewer of the present day living next door to his brewery. He would in all probability be the occupant of some towering mansion in Belgravia or Tyburnia. But times have changed with a vengeance."

One important conclusion to be drawn from a study of the London life of 1837 is that it was more domestic in its character than it has now grown to be. People lived in London as they live now in some of the suburbs, and in some of the distant places to which Londoners travel every day—that is, they looked upon it as home. Let me reproduce a slight picture from the experiences of Fenimore Cooper in 1828. He was friendly with Rogers the poet, and he describes how they behaved in the following delightful manner:—

"Mr. Rogers came to me the other evening on one of his friendly visitations, and I went out with him, not well knowing what was to be the result of it. We trot along the streets together, he a little in the lead, for he is a capital and earnest walker, and I in the rear, getting over the pavement at the rate of four miles the hour. London has certain private ways, called passages, I believe, by which one can avoid the carriages and much of the streets, besides greatly shortening the distances.

We took to a line of these passages and came out in Leicester Square. Crossing this we pursued our way as far as the theatres and entered that of Covent Garden." (Fenimore Cooper, *England*, iii. 97.)

Here is a delightful way of reaching a theatre from the fashionable west end; and one is tempted to ask what has become of the "private ways called passages". Some of them exist now, and very pleasing they are to the real Londoner. Rogers and Cooper no doubt walked through the passage leading from Pall Mall to King's Street—a little bit of old London not quite modernized yet. Many of these passages are worth walking through and taking note of, for when they are not absolutely turned over to the extremely poor they contain elements of London life which it would be difficult adequately to describe. Their chief characteristic is the home-like appearance of houses and occupants.

The fact is, there were no "hansom" cabs in those days, and it is difficult to realize what the introduction of these vehicles meant to London. The post-chaise was a vehicle, says Fenimore Cooper, which the Cockneys do not calumniate when they call it a "post-shay". It is a small, cramped, inconvenient chariot without a box, and, like the interior of the ordinary stage-coaches, does discredit to the well-established reputation of England for comfort (*England*, iii. 67). The hackney-coach had a pair of horses and lumbered slowly along; the cabriolet was designed for lighter conveyance; and the omnibus had just been introduced by Mr. Shillibeer, and promised to be a great success. Von Raumer enthusiastically describes those of 1835, and mentions that

"in the great omnibuses six or seven persons sit sideways opposite to each other, and the entrance is

from behind. They have names of all sorts, from 'Emperor', 'Nelson', and such lofty titles, to the names of the proprietors or of animals. Every ride, long or short, costs sixpence."

Except for the number of private carriages the streets were not so crowded as they now are. In contemporary literature the crowded state of the narrow city thoroughfares is noted with some triumph, and no doubt the western parts of London were getting more crowded as the omnibus became a success. But they were not like the present streets. Thus, to quote again from Fenimore Cooper the evidence of 1828, he says:

"A day or two after my arrival in London an English friend asked me if I were not struck with the crowds in the streets, particularly with the confusion of the carriages. Coming from Paris I certainly was not, for during the whole of March the movement if anything was in favour of the French capital." (Fenimore Cooper, *England*, i. 49.)

Von Raumer, writing in 1835, was of a different opinion. He says:

"The number of coaches and equipages far exceeds all that can be seen in other cities; and you are led to think something extraordinary is going on in this or that street, whereas it is only the daily customary routine. That so many human beings can live together in such a space, carry on their occupations, and procure food, seems, in spite of all explanations, a miracle, and indicates a pitch of civilization compared to which the *latifundia* are at best but grazing-grounds and sheep-walks."

No doubt the west-end improvements in Regent Street had produced the necessary amount of facilities for street traffic of 1837. The difference in the management of that traffic and of the present day

cannot better be illustrated than by another observation of Fenimore Cooper with regard to police regulations. "Walking in Regent Street lately", he says, "I witnessed an attempt of the police to compel some hackney-coachmen to quit their boxes and go with them before the magistrates. A crowd of a thousand people collected immediately, and its feeling was decidedly against the ministers of the law, so much so indeed as to render it doubtful whether the coachmen, whose conduct had been flagrantly criminal, would not be rescued. Instances of this nature might be multiplied." (Fenimore Cooper, *England*, iii. 176.) It says much for the modern police system that traffic can be regulated by the lift of a policeman's finger.

Of the London parks only the Green Park, St. James' Park, Hyde Park, and Regent's Park were open to the public. The Green Park was nothing but a large field cropped down like velvet, irregularly dotted with trees, and without any carriage-way. Paths wound naturally across it, cows grazed before the eye, and nursery-maids and children sprinkled its uneven surface whenever the day was fine. On one side the park was open to Piccadilly, on another it was bounded by the carriage-way to St. James'. (Fenimore Cooper, *England*, i. 66.) This park was drained in 1841, "and its wetness removed" as the official report puts it, and it was then decided not to graze horned cattle there again! Hyde Park was in a more uncultivated and wild condition. It had an evil reputation as the place where duels were fought, and the regular cultivated appearance of modern days was entirely absent. It seems curious that in 1828 Fenimore Cooper could record that "a gravel pit was open in Hyde Park that is a blot upon its verdure" (*England*, iii. 57). Kensington Gardens were the private grounds attached to the palace, and were not used by the public. Regent's

Park had recently been formed, and was a great improvement, and "none but a frozen stockfish", says Von Raumer in 1835, "could really put in practice the *nil admirari* while looking at it, with its surrounding terraces and mansions, its great extent and magnificence". Great improvements were made in 1841. Private parts of the park were thrown open, Primrose Hill was added, bridges over the water were constructed, and other works carried on to make the park more useful.

One feature of London has always distinguished it in modern times from other cities. This is the method of laying out building sites in squares. The large cluster of Bloomsbury squares, the famous Berkeley, Grosvenor, and Belgrave Squares, and the many other squares of lesser note have always elicited a chorus of eulogies from travellers. Von Raumer in 1835 styled them "the great and peculiar beauty of London", and this is not too much to say. They occupy altogether some 1200 to 1500 acres in the centre of London, and thus afford breathing-spaces and green shelters of inestimable value which it would be difficult or wellnigh impossible to create afresh, even with the modern taste for open spaces.

In connection with open spaces, it may be mentioned that so far back as 1819 the *Quarterly Review* had complained of the churchyards being unfit for the interment of the dead, so that "it had become more difficult to find room for the dead than the living". Steps were being taken in 1837 to ameliorate this state of things, but not the right steps. Kensal Green Cemetery had been open for a few years; other cemeteries were springing up all round London, and in 1836 a company was formed and had obtained parliamentary powers for "establishing cemeteries for the interment of the dead, northward, southward, and eastward of the metro-

polis". This did not prevent burials still taking place even in the city churchyards, while in the out-London districts and in the outskirts very little idea of burying elsewhere than in churchyards had been formed. This danger to health has now long since passed away, and the burial-grounds remain for the most part to help out the breathing space of modern London; but that cemeteries should have become the property of private companies is one of those startling anomalies only possible to the London of the early Victorian age.

Many very interesting and on the whole lifelike pictures of London streets in 1837 are still to be obtained by examining the sketches of John Leech. The two little urchins standing up to each other for a fight with an immediate background of bigger urchins supported by a further background of substantial hackney-coach drivers is one of the most typical, and it has been reproduced by Sir Walter Besant in his book *Fifty Years Ago*. The pages of the *Illustrated London News*, which began in 1840, also help us to realize the general characteristic of London streets during the earliest years of the Queen's reign. Some of the characteristics which at once amuse and annoy us to-day were to be seen in the early days of the reign. Thus Von Raumer, writing in 1841, records how, when an election was pending, he "saw in Oxford Street thirty or forty fellows with immensely large placards before and behind, following each other in slow procession; I supposed they were carrying some political squib, and went up to examine it. It was as follows:—'Electors and non-electors of London. Who sells the cheapest clothes? Who has reduced the prices of waistcoats and trousers forty per cent? Moses & Co. in the Minories.'"

Two very interesting points are noted by Fenimore Cooper, who has already been referred

to so frequently. One of these is the street music of London, which he declares is positively the best in the world.

"Respectable artists such as would gladly be received in our orchestras walk the streets and play the music of Rossini, Mozart, Beethoven, Meyerbeer, Weber, &c., beneath your windows. London is not so well arranged for this species of enjoyment as towns of the Continent, for there are no courts in which the performers can get away from the clamour of the streets; but about eight the carriages cease, everybody being at dinner and most of the private places are quite silent. Since the weather has become mild I have frequently paused in my evening walks to listen to airs that have come from harp, violin, and flageolet. A party of French come regularly twice a week and play old French airs beneath the windows, favours that are seldom conferred on private houses, the public hotels being their usual stopping places. Walking to dinner the other day I heard a grand piano on which someone was playing an overture of Rossini accompanied by a flageolet, and I found the artist in the street before the open windows of a hotel. He trundled the machine about on a sort of wheel-barrow, and his execution was quite equal to what one hears in society." (Fenimore Cooper, *England*, iii. 143, 144.)

It cannot be suggested that London has improved in this respect except in the case of the county bands which play in the parks. On the second point also there is no improvement. Fenimore Cooper was walking to a house where he was engaged to dine, when he heard "one of the most appalling street cries it was ever the misfortune of human ears to endure". The words were "*Evening Courier*—great news—Duke of Wellington—*Evening Courier*", screeched without intermission, in a tremendous cracked voice, and with lungs that defied exhaustion. The great novelist was about to buy a paper when another cry in a deep bass voice roared from the opposite

side of the street, "Contradiction of *Evening Courier*—more facts—truth developed—contradiction—*Evening Courier*". This perhaps gives us the humour of the moment, coloured, it may be, by the American's point of view. But it is interesting to find that newspapers had reached this condition of publicity. In 1837 there were eighty-five newspapers of various kinds published in London with a total circulation of about twenty-nine millions. The principal papers were the *Times*, the *Weekly Chronicle*, the *Morning Advertiser*, *Morning Chronicle*, *Morning Herald*, *Sun*, *Standard*, *Evening Mail*, *Globe*, *Sunday Times*, *Morning Post*, *Weekly Despatch*, *Bell's Weekly Messenger*, *St. James Chronicle*, *Bell's Life in London*, *Planet*, *Observer*, *London Despatch*, *Courier*, *Examiner*, *Magnet*, *Evening Chronicle*, *Spectator*, and *Athenæum*. Some of these papers are known to us now, while others have disappeared. But the newspaper was not then a necessity of the day's routine. Mr. Yates's experience was pretty general. "There was", he says, "no penny press in those days, and the finances of the grand-paternal establishment were not in the condition to afford a high-priced daily paper. The old gentleman used to console himself with the *Morning Advertiser*, which was 'lent' from the adjacent Tally-ho Tavern, and came round with the early dinner beer" (Edmund Yates's *Recollections*).

Beyond this London of city commercial life and suburban industrial life, this London of west-end wealth and north and east-end domesticity, the London of the parks, the squares, and the streets, there was a belt of rural country which now belongs to London, though it is no longer rural. This surrounding belt was in 1837 untouched by the jerry-builder, who has succeeded in making large districts of the London of Queen Victoria a mere

stack-house of bricks and mortar. We can now and again obtain an idea of the extent of the evil which has befallen us. There was splendid territory upon which to build up a magnificent Victorian London; there were local considerations which would have made such a thing possible, and it will serve better than anything else if I now attempt a short survey of the early conditions of those boundary districts of London.

Fenimore Cooper, who was, as we have seen, in London a few years before the commencement of the Queen's reign, talks of taking excursions into the country from the capital. What was meant by the country may be gathered by one of these excursions, which was to Richmond Hill! He was disappointed with this famous view, dear to Londoners, but he paints a pretty picture of the "country". The groupings in the parks, he says, contribute largely to their beauty. The mixture of cows and of deer grazing, with children at their sports, horsemen dashing across the view, and stately coaches rolling along the even and winding roads, add the charm of a moving panorama to the beauties of verdure, trees, flowers, paths, and water. "I do not", he adds, "allude to the Sunday exhibitions, for they are Cockney and rather mar the scene, but to the more regular life of the week. You can hardly imagine the beauty of two or three scarlet coats athwart the broad beds of verdure. I have seen battalions parading, but the formalities of lines rather injure than help the effect; though half a dozen soldiers scattered about the grass are like so many fine touches of light in a good picture." Over and over again do we find confirmation of this recorded beauty of rural London in the memorials of the period. "My grandfather and I," says Mr. Edmund Yates, "accompanied by his terrier 'Vic', would walk across the fields to Copenhagen House

—a kind of tea-gardens situated somewhere near Pentonville—or further afield to the Hornsey Sluice-house, a similar resort, which had, I fancy, some connection with the New River, and stood somewhere in the locality of the present Finsbury Park" (Yates's *Recollections*).

The whole of North Kensington was in grass, and Brompton was still occupied with fruit- and market-garden nurseries. Except along the high-road and the immediate vicinity of the parish church there were but few buildings in this part of London. To read Thomas Faulkner's Histories now seems like going back hundreds of years or going a distance of hundreds of miles.

Holland House was in the skirts of London, and was constructed as a country residence. "Though the growth of this mammoth town", notes Fenimore Cooper, "is gradually bringing it within the smoke and din of the capital. The lamps extend miles beyond it" (Fenimore Cooper, *England*, i. 136).

Writing in 1839, Thomas Faulkner says that "the parishes of Hammersmith and Fulham may be denominated the great fruit- and kitchen-garden north of the Thames for the supply of the London market" (*History of Hammersmith*, 32). Florists and horticulturists also carried on flourishing businesses there, and many of the older houses still retain relics of sixty years ago by the possession of a mulberry tree in the now limited garden ground. There were then only 318 acres, out of a total of 2300, occupied by houses, and the rest were utilized either for market-gardening or for corn-growing.

These industries kept this part of London more apart to itself than would generally be the case of a suburb to a large town. They contributed, too, to a characteristic of west London which was conspicuously interesting. All the roads were crowded with market carts during the night so that they

might reach the market by three or four o'clock. Every gardener, according to Faulkner, had his market cart, which he loaded at sunset and despatched in the evening. Each cart was accompanied by a driver and by a person to sell. In the strawberry season hundreds of women were employed to carry the fruit to market on their heads. They consisted for the most part of Shropshire and Welsh girls, who carried baskets of fruit weighing from forty to fifty pounds, and made two journeys in the day from Hammersmith. A contemporary description of these strawberry carriers from Hammersmith and Fulham on the west, Hackney on the north, and Deptford and Camberwell on the south, gives us a picture of London not easily understood from its present conditions.

"A party of these carriers set off with their burdens, walking at a quick pace and occasionally running so that they generally accomplish five miles in an hour during their journey. And it is pleasing to observe with what skill and address from habit they manage their head loads, as they are called, seldom having occasion to hold them with their hands. The burden being placed at the top of the head makes it necessary for the carriers to keep a very upright posture in walking, so much so that young persons in the higher ranks of life have been corrected of a bad habit of stooping by being made to walk with a small weight on their heads without being allowed to touch it with their hands, in imitation of these poor women. The carriers arrive at the principal fruiterers in London early enough for their customers to be supplied with fruit gathered the same morning. The same women meantime proceed with a second load to London even when the strawberry ground is situated seven or eight miles from the fruiterers" (*Saturday Magazine*, 1834, p. 223).

There were about 2000 of these girls, and the sight must have been not altogether unpicturesque.

The girls are always spoken of as well-conducted and comely, saving the money they earned in this manner, and carrying it back with them to their country homes after the season was over. Light kinds of cars were being introduced to supersede the women carriers, but though this mode of conveyance was less expensive it did not convey the fruit in such perfection as when carried on the head, and hence the girls always had employment for the most remunerative part of the trade. The pottle baskets used for carrying were made by women and children in their own homes in the neighbourhood of the strawberry gardens, and Brentford was a principal seat of this industry.

The northern heights were entirely rural, more separated from London than were the western portions. The source of the Fleet river was at Highgate, and in 1837 this was an open stream of entirely a rural character. It flowed through Kentish Town, then also a country suburb, passing by a moated farmhouse which existed in 1838. There is an old prophecy which speaks of certain evils that shall befall the realm of England when Highgate stands in the heart of London. In 1837 this contingency seemed remote enough, for "merry Islington" was then only just filling up as a populous suburb, and Highgate was far behind, although when Mr. Sotheby took Fenimore Cooper in 1828 to see Coleridge at Highgate, the novelist tells us: "We found the bard living in a sort of New England house, that stands on what in New England would be called a green. The demon of speculation, however, was at work in the neighbourhood, and the place was being disfigured by trenches, timber, and bricks" (*England*, iii. 80).

The same story has to be told all round the map, and those who care to pick out these relics of the early topography of London can still do so, by

noting the remnants of villages which are still extant at Hampstead, Stoke Newington, Hackney, Bow, and Bromley, in the most populous parts of northern and eastern London. Bromley High Street, with its quaint relics of Jacobean architecture, its triangular street in front of the church, and its surviving houses within high walls and iron gateways inclosing large garden grounds, is a study which would surprise many people who do not care for these things. On the south the quaintness of Deptford has not quite departed, while Charlton, Eltham, Lee, Kidbrooke, Lewisham, Dulwich, Tooting, Streatham, Wandsworth, and Putney stretch across the whole south side of London, with the sites of their ancient villages still traceable, though rapidly disappearing. Nearer in the centre too the ancient village streets are not quite destroyed, and I still delight to walk through the village street of Marylebone. Many bits of early domestic London, as one may call it, are to be traced here and there if one looks out for them. The courts and alleys deserve a history of their own, and such a history would not be unworthy of Sir Walter Besant's romantic characteristics. Only quite recently Hindon Place, Ship Court, Garden Place, Kine Court, and Pond Place, all in Westminster, not five minutes' walk from Victoria Station, have been destroyed, with their cottages, and gardens enclosed with wooden palings.

This was a different London altogether from the inner London we have already examined in some detail. It was the home life of country villages, with corn-fields and market-garden culture as the chief interest of each. It was a separate life and not a collective life, a life that belonged to each village, and was not then London life at all.

Chapter II.

The London of 1837 (*continued*).

The population of the City of London in 1837 was 123,000, and of the immediate continuous occupied area 1,523,000, or together 1,646,000. If to this be added the population of the outer edge of London, as I have called it, namely about 300,000, we get a total of 2,000,000 to represent the population in 1837, compared with the 4½ millions of 1896.

Now this London population was practically a settled population. London was its home far more than it is now. It did not migrate out of London at every holiday and annually for a month or fortnight. A few of the richer people had "country houses" at a few miles' distance, but the great majority lived their life at home in London.

The means of communication out of London did not allow of any other condition of things. Stage-coaches were the principal means of conveyance. There were 3026 stage-coaches in the whole country, of which 1507 started from London. One of the most picturesque sights of the period was that afforded by the daily departure of the mail-coaches. They started every night about eight o'clock from the Post-office, except on Sunday evenings, when they went off an hour earlier, and a few started from the east end, the mails being conveyed to them in mail-carts. All the rest arrived a short time before the hour of starting from their respective inns, and it is worth while giving a list of these from the Directory of 1837:—

Bell and Crown, Holborn,	... Exeter.
	Louth and Boston.
	Wells, Lynn, and Cambridge.
Belle Sauvage, Ludgate Hill,	... Norwich and Newmarket.

Blossom's Inn, Laurence Lane,..	Brighton.
Bolt in Tun, Fleet Street, ...	Hastings and St. Leonards.
	Portsmouth.
Bull and Mouth, St. Martin's-le-Grand, ...	Glasgow, Carlisle, and Wetherby.
	Leeds.
	Lincoln and Worcester.
	Penzance, Falmouth, and Exeter.
	Thurso, Inverness, Aberdeen, Edinburgh, and York.
Golden Cross, Charing Cross, ...	Carmarthen, Gloucester, and Cheltenham.
	Chester and Liverpool.
	Hastings and St. Leonards.
	Dover.
	Stroud.
	Halifax.
King's Arms, Holborn Bridge, ...	Stourport.
	Birmingham.
	Banbury.
Saracen's Head, Snow Hill, ..	Louth and Boston.
Spread Eagle, Gracechurch St.,	Falmouth, Devonport, and Exeter.
	Hull, Lincoln, and Peterborough.
Swan with Two Necks, Lad Lane,	Devonport, Exeter, and Bath.
	Dover.
	Exeter.
	Halifax.
	Holyhead, Shrewsbury, and Birmingham.
	Hull, Lincoln, and Peterborough.
	Liverpool and Lichfield.
	Norwich and Ipswich.
	Pembroke, Carmarthen, and Bristol.
	Pool and Southampton.
	Port Patrick, Carlisle, and Manchester.
	Stroud.
	Wells, Lynn, and Cambridge.
White Horse, Fetter Lane, ...	Yarmouth and Ipswich.
	Portsmouth.

It took 7½ hours to get to Brighton, 8½ hours to Southampton, 9 hours to Dover, 11¼ hours to Birmingham, 19 hours to Manchester, 22½ hours to Liverpool, 27 hours to Holyhead, and 42 hours to Glasgow. There were fifty-four four-horse mails, and forty-nine pair-horse mails. The greatest speed travelled was 10⅝ miles per hour, and the average speed 8⅞ miles per hour. The average

mileage paid for four-horse mails was 1 7/8*d.* per mile.

Besides the mail-coaches, there were the ordinary stage-coaches, of which about 600 were licensed to run between London and places about twenty miles distant. The inns from which these started were as follows:—

Angel, Farringdon Street.
Angel, St. Clement's, Strand.
Axe, Aldermanbury.
Bank Coffee House, Cornhill.
Bell, 12 Friday Street.
Bell, Warwick Lane.
Bell, Wood Street.
Bell and Crown, Holborn.
Belle Sauvage, Ludgate Hill.
Black Boy and Camel, Leadenhall Street.
Black Lion, Bishopsgate Within.
Black Lion, Water Lane, Fleet Street.
Blossom's Inn, Lawrence Lane.
Blue Boar, Aldgate.
Blue Posts, Holborn Bars.
Blue Posts, Tottenham Court Rd.
Boar and Castle, Oxford Street.
Bolt in Tun, Fleet Street.
British Coach Office, Cockspur Street.
Bull, Aldgate.
Bull, Bishopsgate Within.
Bull, Holborn.
Bull, Leadenhall Street.
Bull and Mouth, Bull and Mouth Street.
Castle, Wood Street.
Castle, Moorgate.
Castle and Falcon, Aldersgate St.
Catherine Wheel, Bishopsgate St.
Catherine Wheel, Borough.
Cheshire Cheese, Crutched Friars.
Clemmitt's Inn, Old Bailey.
Commercial Yard, Moor Lane.
Cross Keys, Gracechurch Street.
Cross Keys, St. John's Street.
Cross Keys, Wood Street.
Crown, St. Paul's Churchyard.
Elephant Inn, Fore Street.
Flower Pot, Bishopsgate Street.
Four Swans, Bishopsgate Within.
French Horn, Crutched Friars.
George, Aldermanbury.
George, Borough.
George, Old Bailey.
George, Smithfield.
George, Snow Hill.
George and Blue Boar, Holborn.
George and Gate, Gracechurch St.
Gerrard's Hall, Basing Lane.
Gloucester Coffee House, Piccadilly.
Gloucestershire Warehouse, 33 Whitecross Street.
Golden Cross Inn and Norfolk Hotel, Charing Cross.
Golden Horse, Glasshouse Yard, Aldersgate.
Golden Lion, St. John's Street.
Goose and Gridiron, St. Paul's Churchyard.
Nos. 4, 8, and 11 Gracechurch Street.
Green Dragon, Bishopsgate Street.
Green Man and Still, 335 Oxford Street.
Greyhound, Grub Street.
Half Moon, Borough.
Hercules, Leadenhall Street.
Horse and Groom, St. John St.
Horse Shoe, Blackman Street.
Horse Shoe and Magpie, Bridge Street, Westminster.
India Arms, 44 Lime Street.
Ipswich Arms, Cullum Street.
Jolly's Warehouse, 13 Aldersgate Street.
King's Arms, Bishopsgate Street.

King's Arms, Holborn Bridge.
King's Arms, Leadenhall Street.
King's Head, Borough.
Kings and Key, Fleet Street.
Lamb, Leadenhall Market.
Lewes Arms, Swan Street, Dover Road.
London Warehouse, 126 London Wall.
Magpie and Stump, Newgate St.
Mitchell's Warehouse, 69 Old Bailey.
Moore's Warehouse, 122 Oxford Street.
Nag's Head, Borough.
Nag's Head, James Street, Covent Garden.
New Inn, Old Bailey.
New Inn, Old Change.
New White Horse Cellar, Piccadilly.
18 Old Bailey.
Old Bell, Holborn.
Old White Horse Cellar, Piccadilly.
One Swan, Bishopsgate Without.
Oxford Arms, Warwick Lane.
Parker & Foster's Warehouse, 17 Old Change.
Pewter Platter, Gracechurch St.
Queen's Head, Borough.
Ram, Smithfield.
Red Lion, Aldersgate Street.
Red Lion, Strand.
Rose, Farringdon Street.
Rose, Smithfield.
Salisbury Arms, Cow Lane, Snow Hill.
Saracen's Head, Friday Street.
Saracen's Head, Aldgate.
Saracen's Head, Snow Hill.
Shepherd's Warehouse, 35 Camomile Street.
Ship, Charing Cross.
Silver Cross, Charing Cross.
Spotted Dog, Strand.
Spread Eagle, Gracechurch Street.
Spur, Borough.
26 Sun Street, Bishopsgate.
Swan, Holborn Bridge.
Swan with Two Necks, Lad Lane.
Talbot, Borough.
Three Cups, Aldersgate Street.
Three Nuns, Whitechapel.
Van Inn, 18 Giltspur Street.
Vine, Bishopsgate Within.
White Bear, Basinghall Street.
White Bear, Piccadilly.
White Hart, Borough.
White Hart, Strand.
White Hart, St. John's Street.
White Horse, Cripplegate.
White Horse, Fetter Lane.
White Horse, Friday Street.
White Swan, Whitechapel.
Windmill, St. John Street.

These coaches enabled about 68,000 individuals to enter and leave London daily. The immense traffic, says a contemporary writer, between London and the suburban districts within a twelve miles' radius from St. Paul's is an interesting object of contemplation. In the mornings from the hours of eight to ten the various short stages and omnibuses are passing us bearing with them the merchant to his business, the clerk to his bank or his counting-house, the officials to Whitehall, Mint, Somerset House, or elsewhere. The movement was extending rapidly. Even those whose incomes did not allow

the daily sum of one or two shillings for conveyance out and into London, endeavoured to meet the new state of things by walking in fine weather and riding in the wet. Thus, from Stepney and Mile End in the east, from Camberwell, Peckham, Walworth, and Brixton on the south, from Chelsea and Brompton on the west, from Hampstead and Highgate on the north, and from Hackney, Clapton, and Homerton on the north-east, there was a daily inpouring and outpouring. There was also the district beyond this—the limits, that is, of the threepenny post. Within these limits there were 850 short stages and omnibuses plying, some making two to six journeys daily, but the majority ten to twelve. The fares were for all short distances 6*d.*, for longer distances, as to Richmond, 1*s.*, 1*s.* 6*d.*, and 2*s.* But even something more was tried than horse omnibuses. A steam-carriage ran from Paddington to the Bank for a short time, and another along the Stratford and Islington roads. They carried from fifteen to twenty persons, and travelled at the rate of from eight to ten miles an hour. The number of omnibuses on the principal routes were:—

Between Angel at Islington and Elephant and Castle, Newington Butts, ...	17
Elephant and Castle and Charing Cross, ...	3
West End (along the New Road or Marylebone Road) and Bank, ...	54
Charing Cross to Blackheath, ...	14
Piccadilly to Blackwall, ...	41
Chelsea to Leadenhall Street, ...	27
Charing Cross to Hampstead, ...	19
Bank to Paddington Road, ...	25

There was no penny post in London, and, of course, no halfpenny, newspaper, or parcel post. There was a twopenny post for letters within three miles from the General Post-office, but there was no means of sending parcels except by intrusting

them to the guards of the stage-coaches. The postage from London to the country twelve miles round was threepence, and so on up to about 13*d.* for a letter to Alnwick.

Of the great railways which now converge upon the capital there were practically none in existence in 1837. The London and Greenwich line was begun in 1834, and part of it, as far as Deptford, was opened in February, 1836. But the modern railway traveller would hardly recognize the system then introduced. Mr. Smiles describes the working of this railway, when first exhibited, as a show. "The usual attractions were employed to make it 'draw'. A band of musicians in the garb of the Beef-eaters was stationed at the London end, and another band at Deptford. For cheapness' sake the Deptford band was shortly superseded by a large barrel-organ, which played in the passengers; but when the traffic became established, the barrel-organ, as well as the Beef-eater band at the London end, were both discontinued. The whole length of the line was lit up at night by a row of lamps on either side like a street, as if to enable the locomotives or the passengers to see their way; but these lamps also were eventually discontinued as unnecessary. As a show the Greenwich Railway proved tolerably successful. During the first eleven months it carried 456,750 passengers, or an average of about 1300 a day." (Smiles, *Life of George Stephenson*, p. xxi.) The London and Birmingham line (now the North-Western) was begun in 1834 and opened in 1838. The London and Southampton was begun in 1835; the London and Croydon and the Great Western from London to Bristol in 1835; the South-Eastern from London to Dover in 1836; the West London from Paddington to Kensington in 1836; the Eastern Counties from London to Colchester in 1836; the London and Blackwall in

1836; the London and Brighton in 1837. Beyond this there was nothing to indicate the remarkable position to which railway travelling has now reached; and it is an oft-repeated story by those who first travelled by railway, that the carriages were more like the modern cattle trucks, open at the top, than anything we now know in the shape of railway-carriages.

It is most interesting to recall that it was on the 28th July, 1837, that the first experiment with the electric telegraph took place. The scene of the experiment was between Euston Square and Camden Town stations, the North-Western Railway Company having sanctioned the laying down of wires between those places immediately upon the taking out of the patent by Messrs. Wheatstone & Cooke. The position electricity has now assumed does not prepare us for a beginning so recent as this.

The roads were turnpike roads. Westward there were turnpikes at Knightsbridge, Kensington, and Hammersmith; also at Marble Arch and Notting Hill—the fact is still preserved in the name Notting Hill Gate—and Shepherd's Bush; northwards there were two in the Euston Road, then the New Road, one close to Great Portland Street, and the other at Gower Street, and there was one at St. James's Church, Hampstead; at King's Cross there were two, one on the east and one on the west; at St. John's Street, Clerkenwell, there was one, two were in the City Road, one in New North Road, Hoxton; eastward there were one at Shoreditch, one in the Bethnal Green Road, one in Commercial Road, three in the East India Dock Road; southwards there were three in the Old Kent Road, one in Bridge Street, Vauxhall, one near the Obelisk, and one at Kennington Church.

The turnpike gate was picturesque enough, and there are preserved many well-known illustrations

of the more famous of these obstacles to locomotion. They were constructed by Act of Parliament passed when such elementary problems as the economics of taxing commodities for the improvement of highways had scarcely been approached. But in 1837 the prosperous days of turnpike roads had ended. Thus, the report of the Commissioners of the Metropolitan Turnpike Roads for 1837–1838 states that they have found it necessary to take the greater portion of the tolls into their own hands instead of letting them by auction as heretofore. When the tolls for the current year were put up to be let by public auction at the usual period it was found that no bidders would offer for several of them at nearly the amount which they had been let for in former years. It appeared to be the opinion that the opening of some railways north and west of London in the course of the year would materially interfere with the receipts on the ordinary roads. The commissioners retained therefore in their own hands the tolls on nine of the most important districts of roads. The total receipts from tolls, £78,629, 6*s*. 2*d*., and from all sources amounted to £83,766, 7*s*. 2*d*., while the total expenditure amounted to £82,993, 9*s*. 1*d*., including interest on the debt of the commission and the fifth instalment of £5000 in diminution of principal.

These facts gathered together from many sources will convey to the reader a pretty general idea of what London was like in 1837. But there remains one final aspect of the London of 1837 to consider, and that is its mode of government. The inadequacy of this will account for some of the saddest aspects of London life during the whole period of the Queen's reign. While Glasgow and Edinburgh, Liverpool, Manchester, and other provincial cities possessed not only settled forms of government, but had obtained control over water supply

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and other services of recognized public necessity, London was left alone without government up to 1855, and was then experimented with in a manner which even now seems almost incredible. The City Corporation during this period abandoned its control of the Thames, neglected its opportunity to reacquire the water supply, and behaved generally not as a local government authority, but as a party of private gentlemen looking after their own interests; the governments of the day appointed commissions and neglected their reports, watched London grow beyond the growth of ordinary cities, imposed the ugly and useless machinery of the Board of Works, and then left things to take their chance. And London is the capital of the empire!

The City of London was governed by its corporation, with a constitution untouched by any of the reforms which had accomplished so much for the provincial boroughs—a corporation prepared to surrender rights and neglect duties which did not add to its fancied dignities, or which might prove expensive—a corporation always ready to fight for keeping its revenues within the limited sphere of public good, which those who were elected to govern and administer the affairs of the city were capable of perceiving. That the city in 1837, and for some years later, could keep up a fiscal distinction between its own area and the contiguous area around by levying tolls at the several gates of the city "on all carts not the property of freemen", and notwithstanding that the objects for which these tolls appear to have been levied had long since been otherwise provided for, speaks volumes against the government of London at this period. Besides the Corporation, there were also the Commissioners of Sewers, an anachronism bequeathed from Henry VIII.'s legislation, and no less than 112 distinct parishes each with governing powers over areas

sometimes so small as not to include the whole of one great institution, as, for instance, the Bank of England.

Outside the city all was chaos. There is no possibility of describing the state of things actually existing in 1837, for there is no material to show it. What material there may be lies in the official documents scattered here and there or preserved in the archives of a few of the local authorities who in 1855 succeeded to the older authorities. But fortunately the condition of things in 1855 is known. It is preserved in the speech of the minister, Sir Benjamin Hall, who brought in and carried the Metropolis Management Act of that year, and there is little doubt that the main facts of 1855 are but reproductions of those of earlier years, with the possibility that the earlier years might have been worse. What existed in 1837 existed in 1855, for no legislation had occurred to alter it.

The government of 1837 consisted of parish administration supplemented by the administration of various commissioners of sewers. By an act 23 Henry VIII. the care and control of the various streams in the immediate neighbourhood of London and of communicating ditches and sewers, in fact, all matters relating to the drainage of "rain and wast waters", were put under the authority of Crown-appointed bodies called Commissioners of Sewers. By this act and the several amending acts there were, in 1837, eight distinct courts of commissioners for the London district. They were those of the City (which until 1897 retained its separate authority), Westminster, Holborn and Finsbury, Tower Hamlets, and Surrey and Kent, with the three minor commissions of Poplar Marsh, St. Katherine's-by-the-Tower, and Greenwich.

The Westminster Commission originally governed that part of Middlesex west of the City from

the Thames to Hampstead and Willesden, Chelsea, and Kensington. Subsequently the jurisdiction was extended to include Hammersmith, Acton, and Ealing, and the riverside Middlesex villages as far as Hampton.

The ancient streams of London had been gradually converted into sewers. Thus the King's Scholars' Pond Sewer, was so called because it emptied itself into the Thames at the King's Scholars' Pond (near the present Vauxhall Bridge), on "the great level extending from the Horse Ferry to Chelsey Mead". Incidentally it may be mentioned that during the reign of Queen Anne the name of the sewer was dutifully changed to Queen's Scholars' Pond Sewer. Anciently it was known as the Tyburn Brook, and later as the Aye Brook, and flowed down the hill from Marylebone Fields, passing near the old village of Tyburn and across the Acton or Tyburn Road (Oxford Street), and the present Brook Street, through Mayfair to the Stone Bridge, situated at the "dip" in modern Piccadilly. Passing under the bridge and the high-road to Kensington, it entered the Green Park. This was formerly St. James's Fields, until Charles II. inclosed them, and added the land thus inclosed to St. James's Park, by which name the whole was known until a comparatively recent period. Large ponds were formed in the course of the sewer in this part of the park. At the bottom of the hill the streamlet passed through the gardens of Goring or Arlington House, where Buckingham Palace now stands, and along by the "coach road to Chelsea"—the present Buckingham Palace Road —and what is now Vauxhall Bridge Road to the river. At different periods the stream was altered in various parts of its course, and gradually covered in and converted into an underground sewer.

There were other small tributaries of the Thames

which became in course of time underground sewers. One was the Bayswater Brook or West Bourne, which became the important Ranelagh Sewer, and part of which was utilized to form the Serpentine. A glance at a map of the original winding course of this stream will easily explain the origin of the name Serpentine, for which Mr. Loftie, in his *History of London*, confesses himself unable to find a reason. Farther west was the Counter's Creek, with its tributary the Stinking Ditch. Smaller sewers were the Long Ditch and others in the city of Westminster, and the Hartshorne Lane and Essex Street sewers, both of which drained an immense number of courts and alleys north of the Strand.

The Holborn and Finsbury district comprised the Holborn parishes, the parishes of St. Pancras, Islington, Clerkenwell, St. Sepulchre, St. Luke's, and Shoreditch, with the liberty of Norton Folgate. The chief streams were the Fleet, with its feeders, and the Wall Brook. The oldest document left by this commission is a book of "presentments" of the jury of sewers, dated 1683, containing statements of nuisances requiring abatement and repairs necessary to the banks and arches of the sewers. Hockley-in-the-Hole, Hicks' Hall, the Pindar of Wakefield, Battle Bridge, and other places of antiquarian interest are frequently mentioned in this and in the minute-books.

The jurisdiction of the Tower Hamlets Commissioners embraced the ancient manor of Stepney, extending as far north as Hackney, which parish was afterwards included. An exceedingly interesting map of Stepney, by Joel Gascoygne (1703), shows the position of the nine hamlets of the parish. These were Ratcliff, Limehouse, Wapping, Poplar, Spitalfields, Bethnal Green, Bow, Mile End Old Town and Mile End New Town, the original "Tower hamlets". The gradual development of

the "hamlets" into parishes, beginning with that of Limehouse, in the reign of Queen Anne (whence the complimentary dedication of the church to Saint Anne), can be traced in the various records. Part of Poplar, the Isle of Dogs, was placed under a separate commission, as were also the hospital and precinct of Saint Katherine-by-the-Tower.

The southern shore of the Thames from the river Ravensbourne in Kent to East Moulsey in Surrey, was placed under the authority of the Surrey and Kent Commissioners. Their limits extended as far south as Hayes, Croydon, Waddon, and Croydon.

These various Commissions were amalgamated in 1848 into one body called the Metropolitan Commission of Sewers. They did much useful work, and many of their reports and various publications are still very interesting reading to the student of London. But they did not bring into the disintegrated parts of London uniform administration or successful rules of sanitation. The facts of 1855 are almost startling in their crudity, and their existence was dependent upon long-continued practice. I shall make no excuse for quoting the evidence of these facts from the remarkable speech of Sir Benjamin Hall in 1855. This speech, buried in the pages of Hansard, is an historical document of much value, and deserves to be brought into more prominent notice.

Sir Benjamin Hall cited cases from each of the metropolitan boroughs, and began with that of Finsbury. In the Liberty of the Rolls the vestry was composed of "the ancient inhabitants", that is, such as had served the office of overseer. The paving committee had 1509 yards of streets, and paid £126 a year in salaries, or £147 per mile. St. Sepulchre had nearly 1¼ mile of streets, and paid £129 for supervision. The commission was self-elected. Ely Place was 326 yards long, and paid £156, 2*s.* for its superintendence, being at the rate of

£842, 15*s.* per mile. In St. Giles and St. George, Bloomsbury, no person was entitled to attend or vote at the meeting for the election of vestrymen unless he was rated to the poor-rate at an assessment of £25, and no person letting part of his premises could be a vestryman, although he might be rated at £500 a year. In Islington the qualification was £20. He next adverted to the borough of the Tower Hamlets. In Norton Folgate the vestry was composed of those inhabitants who had served, or paid fines for refusing to serve, either of the offices of overseer, constable, or headborough. In Christchurch, Spitalfields, it was composed of those who had been either churchwardens or overseers. In St. Botolph Without, Aldgate, it was composed of persons who had served all the parochial offices, namely, head-borough, constables, churchwardens, and overseers. The vestry had existed in this form from time immemorial, and was not constituted by any local act. In St. John, Hackney, the vestrymen were elected by the inhabitants, but no inhabitant could vote who was assessed at less than £40 a year. In Mile End New Town the qualification was £12; in St. Paul, Shadwell, £10; in St. Mary, Stratford-le-bow, £15; in All Saints, Poplar, £30. In St. George's-in-the-East inhabitants could vote who paid 24*s.* a year to the poor-rate; while in St. Anne, Limehouse, they must pay 48*s.* a year. St. Leonards, Shoreditch, had three paving boards; one of these, the High Street Commission, had one mile of street, and paid in salaries, £118, 2*s.*, was self-elected and for life. Another, the Hoxton Square Trust, had 456 yards; salaries, £47, the receipts being £46; rate per mile, £186, 13*s.* 4*d.*; commission self-elected and for life. Old Artillery Ground, 814 yards; salaries, £122, 8*s.*; rate per mile, £264, 13*s.*; self-elected and for life. St. George-in-the-East: the paving was under 5 separate boards; the lighting and cleansing under 3 boards, one of which paid at the rate of 16*s.* 7½*d.* each for the supervision of 363 lamps. In the Borough of Lambeth, St. Mary, Newington, had 2 paving and 4 lighting boards, which were confined to the parish, and 5 other boards which also extended

over other parishes. The average cost of the superintendence of each lamp was 11*s.* 6*d.* Of these boards 7 were self-elected. Lambeth had 9 lighting boards, and the average cost of the superintendence of each lamp was 11*s.* Next came the borough of Southwark. In St. George-the-Martyr the paving was under 6 different boards, and the West Borough Pavement Commissioners had 2¼ miles of streets, and paid £484 in salaries, or £217 per mile. They were self-elected and for life, and there were 2 other boards similarly elected. In St. Olive, St. Thomas, and St. John the East Southwark Commissioners paid £851 for little more than 6 miles of road, or £136 per mile; self-elected and for life. In St. John's there was a select vestry elected by the parishioners, one-half by persons rated at £75 and upwards; one-half under £75 and not less than £10. Turning to Westminster, he found that the parish of St. George, Hanover Square, contained 1161 acres, and was in three divisions. The part under the vestry elected under the provisions of Hobhouse's Act had 14 miles of road, paid in salaries £638, or £45 per mile. When he turned to Belgravia, which was under a separate jurisdiction, he found it, if not one of the worst managed, certainly the most extravagantly managed in the Metropolis. The Grosvenor Place Trust had 12 miles of road. The salaries paid were £1323, or on the average £110, 5*s.* per mile. Besides these there was another district of about 218 acres, lying below Grosvenor Place, which was without any jurisdiction, but was kept in order by the Messrs. Cubitt, who built the houses there, and, if they abandoned their present supervision there would be absolutely no jurisdiction for paving purposes in that district. In St. Mary-le-Strand there were 480 yards of streets; the salaries £120, or £440, 8*s.* 6*d.* per mile. In the Savoy there were 600 yards of streets. The amount paid in salaries was £84, 15*s.* 9*d.*, or £248, 14*s.* 2¼*d.* per mile. The case of the Strand was exceedingly singular. There were in the whole of the Strand Union 11 miles of streets, over which no less than 7 different paving boards, each with its establishment of clerks, collectors, surveyors, and

other officers; and to show in what manner the officers were appointed, it was only necessary to observe that one of the surveyors was, when appointed, a tailor, and another a law-stationer. The cost to the rate-payers for maintaining the official staff attached to these boards was £88 a mile. Then, as to the mode in which, under the existing system, the great thoroughfares were managed in reference to the paving and lighting. In order to give an illustration of this, he gave a description of the Strand, commencing at Northumberland House, and ending at Temple Bar, a distance of about 1336 yards, or a little more than ¾ of a mile, the street is divided into 7 different paving boards. First was St. Martin's, from the starting-point to the centre of Cecil Street (between Nos. 84 and 85), a distance of about 480 yards. Up to this point the whole width of the street belonged to St. Martin's, but from Cecil Street to opposite the centre of Burleigh Street (near No. 112), a distance of 145 yards, only one-half the street (the north side) was under that paving board. The other half, from Cecil Street (between Nos. 84 and 85) to No. 107, a distance of about 118 yards, belonged to St. Clements. At No. 107 the district belonging to the Savoy commenced, and for a distance of about 27 yards the street was divided between the Savoy and St. Martin's, from opposite the centre of Burleigh Street (near 112) to opposite the east side of Wellington Street North (near 135), a distance of about 83 yards, the street was divided between the Savoy and St. Clements, and from this point to Duchy Place (between Nos. 137 and 138), a distance of about 25 yards, it was divided between the Savoy and St. Mary's. From this point to the east end of St. Mary's Church (near 161), a distance of about 226 yards, the whole width of the Strand belonged to St. Mary's, with the exception of a piece in front of Somerset House. This portion was about 45 yards long and 12 yards wide. It was repaired by the Somerset Place contractor. From the east end of St. Mary's Church to Temple Bar, a distance of about 400 yards, the whole width of the Strand belonged to St. Clement's. The different paving boards along the

Strand, from No. 1 to Temple Bar, therefore, came in the following order:—1, St. Martin's alone; 2, St. Martin's and St. Clement's; 3, St. Martin's and the Savoy; 4, Savoy and St. Clement's; 5, Savoy and St. Mary's; 6, St. Mary's alone; 7, St. Mary's and Somerset Place; 8, St. Mary's alone; 9, St. Clement's alone—the distance being 1336 yards, or ¾ of a mile, and there being 9 divisions. Cecil Street, a street running from the Strand towards the river, with a carriage-way about 10 yards wide, was under 2 separate managements, namely, St. Martin's and St. Clement's. Along Wellington Street North, from the north end of Exeter Street to the south side of the Strand, a distance of 100 yards, there were 4 separate jurisdictions, namely, St. Paul's, Covent Garden, St. Martin's, St. Clement's, and Savoy. It happened that St. Clement's division came close up to the houses at the east side of Wellington Street North. The paving of the roadway, for a considerable length of the street, was, therefore, done by that parish, but as the houses on the east side were in St. Mary's, they could not be rated for the repairs of the roadway. A precisely similar case, as regards the number of jurisdictions, occurred from the north end of Exeter Street, along Burleigh Street, to the south side of the Strand. Here the houses on the west side of Burleigh Street were in St. Martin's, the division between that parish and St. Clement's took nearly the line of the footway, so that here again St. Clement's repaired the carriage-way, and got no rates from the houses on the west side of the street. The boundaries of the parish of St. Anne, Soho, or that portion of it under the paving board, were the west side of Crown Street, the west side of Moor Street, and the west side of West Street. The east of these streets belongs to St. Giles's, Upper St. Martin's Lane, together with the north side of Great Newport Street, the west side of Castle Street (as far as Bear Street), the north side of Bear Street, the north and west sides of Leicester Square, and the north side of Spur Street. The other sides of these streets are in St. Martin's; as are the east side of Princes Street, the east side of Wardour Street, while

the other sides of these streets, with the exception of a short piece, are in St. James's. As in the case of St. James's, some of the most inconvenient boundaries were paved, by arrangement, by either one board or the other.

By an Act of Parliament St. Martin's paved as far as the Horse Guards. Nearly all the other boundaries of St. Martin's were along the centre of the streets. Coming next to St. James's, only one-half of Piccadilly, Princes Street, Coventry Street, and Wardour Street were in the district of St. James's, and owing to the narrowness of the streets much inconvenience arose as to the division of the paving; and arrangements were therefore made between St. James's and the neighbouring boards for one or other of them to pave the whole width of the street in some of these instances. Then all the boundaries of the different jurisdictions in Westminster were in the middle of the street, so that one side of the street was governed by one body and the other by another. This led to constant difficulties and quarrels between them, to the great inconvenience of the inhabitants. There was one great thoroughfare in this metropolis where the centre of the road was under one head as far as regarded the pavement, but the lighting and watering, unfortunately for the inhabitants, rested with two other boards—one on the north, and the other on the south. These two boards quarrelled, one of them saying, "We will have the watering done in the morning", and the other saying, "We will have the watering done in the evening". And the fact was that in the summer months one side of the road might be seen watered in the morning and the other in the evening; so that both sides were, in fact, covered with dust during the whole of the day, but the neighbours had, of course, to pay the rate.

After instancing Piccadilly and St. James's Street as also affording illustrations of the inconvenience of great thoroughfares being under different paving boards, in consequence of one part of the thoroughfare being in one parish, and another in another, Sir Benjamin Hall referred to Marylebone, the borough he himself represented, and which, he believed, was managed worse than

any other part of London. This was no fault of the inhabitants themselves. He began with the western part of the borough, numbering about 400,000 inhabitants. One parish had 170,000, another 160,000, and the third about 50,000 inhabitants; and the whole borough, having reference to its size, was perhaps the richest district in the world. But how was this large borough governed? To begin with Paddington, it was governed by a local act passed in 1844, under the provisions of that antiquated statute known as Sturges Bourne's Act; and a person must be rated at £10 before he could have one vote in the election of vestrymen, being a higher qualification than was required to give him a vote for members of parliament, as in that case the real, and not the rateable, value of the house must be £10.

Number of assessments under £50	...	...	3582	having 1 vote.
,, ,,	at £50 and under £75,		1333	,, 2 votes.
,, ,,	at £75 and under £100,		732	,, 3 ,,
,, ,,	at £100 and under £125,		431	,, 4 ,,
,, ,,	at £125 and under £150,		259	,, 5 ,,
,, ,,	at £150 and upwards,		607	,, 6 ,,
Total, ...	...	...	...	6944

So that one-eleventh of the ratepayers, or 607, had 3642 votes, which was more than the number of votes possessed by 3582 ratepayers in the same parish, and was more than half the number of assessments in the parish. The vestrymen appointed a committee of 18 to manage the affairs of the parish; their decision might be overruled by the *ex-officio* vestrymen, amounting to nearly 40 under the Act. Every resident peer, privy councillor, and member of Parliament, every judge and every magistrate was an *ex-officio* member of the governing body of the parish, and besides those, the Connaught trustees appointed a vestryman and the Grand Junction Canal Company another. There was this peculiarity about the constitution of the vestry—no innkeeper could have been elected. In 1845 an attempt was made to upset this absurd state of things, and to introduce Hobhouse's Act, which requires half the rate-

payers to vote, and a majority of two-thirds of those who vote must vote in favour of the adoption; the consequence was, that though 1991 supported the change, there being 1212 against it, the proposed alterations could not be made. Three years had to elapse before the proposition could again be entertained. It was again attempted in 1853, when 2449 voted in favour of adopting the Act, and only 11 against it, but the number was slightly reduced below the requisite amount on scrutiny, and the ratepayers failed again. So much with regard to the western parish. He next dealt with the eastern; and there he found the most extraordinary state of local management that ever existed in any country—he referred to St. Pancras. There were 16 paving boards; and a great portion of the parish was without paving, and without any jurisdiction whatever. The manner in which so many different boards were created was this. When a person had some land which he wished to let out on building leases, he applied for an Act of Parliament. This had been the case with the Somers Town, the Camden-town, the Southampton, the Bedford, and other estates. In the Camden-town district there were 15 self-elected commissioners, of whom about 7 attended. There was no treasurer. There were 4½ miles of road, and they spent £408, 17*s.* for officers' salaries, the whole expenditure for paving being £336, exclusive of lighting; they had incurred a debt of £11,100, and levied 1*s.* per pound upon the rateable value. There were no public pumps. Take the Doughty estate: there were no public pumps—rate 2*s.* 6*d.* in the pound; there were 18 commissioners, and the sum expended for repairs £1, 17*s.* 4*d.*, whilst there were expended for salaries £183, 8*s.* 9*d.*; debt £6732. On the Foundling Estate Paving Board the commissioners were self-elected; about 10 attended; they had 1¼ mile of road, and expended £765, 19*s.* 1*d.* in repairs, and paid £313, 5*s.* 5*d.* to officers, clerks, &c.; they had a debt of £20,476, which was 50 per cent on the rateable value, and levied a rate of 1*s.* 6*d.* in the pound, besides special rates. On the Lucas Estate Paving Board, they had about ¾ of a mile of

road, paid £38, 19*s.* for paving, and £117, 14*s.* for salaries and collection. They had a rateable value of £5867, and a debt of £4909. No public pump. In Somers Town there were 21 commissioners, self-elected; about 8 attended; they had not any treasurer, had 3 miles of road, and spent £538, 7*s.* 8*d.* in repairs, and £301 in salaries; they had a debt of £15,000, which was 35 per cent on the rateable value, and levied 10*d.* in the pound. One pump. On the South-Western District there were 75 commissioners, self-elected; attendance 11. They had 5 miles of road, expended £983, 14*s.* 6*d.* in repairs and watering, and £352 for officers, besides a residence for the clerk and surveyor, and they had a debt of £5500, and levied 1*s.* in the pound on the rateable value. On the Southampton Estate Paving Board, only 12½ miles of road, and the payments to officers amounted to £677, 4*s.*, being more than £50 per mile for official payments. In other respects this board was well managed. With respect to Holmes Estate Paving Board, the amount authorized to be raised by the Act was £1500, but it was believed bonds to about the extent of £2400 had been issued; commissioners self-elected; no interest or annuity had been paid since the year 1836 or 1837; for the last fifteen years no operations under the Act of Parliament had taken place, and the pavements and roads within the district were in a most dilapidated, dangerous, and dirty state, and under no efficient control; the books and papers of the expired commissioners were believed to have been destroyed. Thus it appeared that those parts of this great parish which had any paving at all were governed by 16 district boards, 11 of which are self-elected, and wholly irresponsible to the ratepayers. There were 427 commissioners, of whom 255 were self-elected. They had set up 14 public pumps for the use of 170,000 inhabitants, of which one was returned as out of order. They had 40 miles of road and 63 officers of various sorts to superintend, and these 63 officers received no less than £4000 a year in salaries, or £100 per mile; and to complete the whole, they had incurred debts to the amount of £135,357. So that excluding the South-

ampton district, which had little or no debt, these commissioners, most of whom were self-elected, had incurred a debt of about £140,000, or exactly £5000 per mile, for which, of course, the ratepayers were liable, and of which liabilities they had little or no knowledge. So much for the local government of St. Pancras under petty self-elected boards. Now, contrast St. Pancras parish with the parish of Marylebone, which was governed by one board. In Marylebone the population was 160,000, in St. Pancras 170,000. Marylebone contained 1560, St. Pancras 2700 acres. The number of officers in Marylebone were 4, in St. Pancras 63. In Marylebone the cost of the staff was £657, in St. Pancras £4000. The debt of Marylebone was £16,000, which was chiefly created under the old unreformed vestry, of St. Pancras £135,000 on the paving boards alone. In Marylebone the streets were paved by the board, in St. Pancras they were, to a great extent, let out to contractors. He quoted this to show how much saving had been effected in Marylebone compared with St. Pancras, by having one board—the same as the vestry—and how expensive was the other under many boards.

He next gave a summary of the management of the Metropolis. It had a population of 2,233,108; number of inhabited houses, 291,240; rateable value, £9,011,230, exclusive of the City of London. The number of different local acts in force in the Metropolis was about 250, independent of public general acts, administered by not less than 300 different bodies; 137 of these had returned the numbers comprising these bodies, and they amounted to 4738 persons. From the other boards there was not any return; but taking the same average for them, there would be 5710 more persons; so that upon that computation the whole Metropolis was governed by no less than 10,448 commissioners. Besides these, there were the following chartered bodies:—Lincoln's Inn, Staple Inn, New Inn, Gray's Inn, Furnival's Inn, Charterhouse. There were 30 parishes, containing 880,000 inhabitants, and assessed to real property in 1843, at £3,900,000, which might probably amount to much

more than £4,000,000 at the present time, consequently they represented nearly one-half of the whole value of the Metropolis. On examination it appeared that these parishes were each of them governed either wholly or in part by commissioners or trustees, who were self-elected, or elected for life, or both, and therefore in no degree responsible to the ratepayers. The case of St. Pancras was one of the greatest instances of abuses that had ever existed in a civilized country. In the year 1834 these parties came to parliament through their vestry. They desired their vestry to expend money for the purpose of remedying these abuses. The bill was thrown out in the second reading. In 1837 a similar attempt was made with similar results, but at a heavy cost to the ratepayers. In the year 1851 they were more fortunate. A bill was introduced and was referred to a select committee. It passed through the committee, and was sent up to the House of Lords, where it was thrown out, and from that time to the present no step had been taken to remedy these abuses, because they spent £4000 on the former occasion, and the paving boards, over which they had no control, spent nearly £3000 in defeating the ratepayers, which the ratepayers had likewise to pay. There were 2 other boards in the Metropolis which had great powers of taxation, over which the ratepayers had no control. One of these bodies consisted of the officers appointed under the Metropolitan Buildings Act of 1844, and the other body was the Commission of Sewers. The officers appointed under the Metropolitan Buildings Act consisted of a registrar, appointed by the Chief Commissioner of Works, at a salary of £1000; an official referee at a salary of £1000; and other referees and officers, at salaries making a total of £5510, who were paid partly out of the consolidated fund, and partly out of the county rate. Besides these, there were 52 surveyors, appointed by the magistrates in quarter sessions; they had incomes varying from £200 to £1600 per annum, derived from fees, and the total amount received by them in 1853 was no less than £24,364; so that the cost of this establishment to the country and to the

ratepayers was just £30,000 per annum, over which there was no control whatever. Soon after Sir Benjamin Hall was appointed to the office he held, the cholera was almost at its height, and it became his duty to inquire what these officers had done, whether they had prevented dwellings in cellars contrary to the provisions of the Act, and he found that they had greatly neglected their duty. He reported to the Secretary of State, and sent a copy of the report to the Chief Commissioner of Works. In police division B there were 137 cellar dwellings. In police division D, comprising part of St. Marylebone and Paddington, there were 1260. In these parishes there were two surveyors, one receiving £540, 13*s.*, and the other £1544, 6*s.* 6*d.* per annum. In the police division E, comprising St. Pancras and other parishes, in which the surveyors received incomes varying from £100 to £1557, 13*s.* 6*d.*, and in 1852 the amount paid to the surveyor in St. Pancras was £1791, 15*s.* 6*d.*, there were 183 of these dwellings. In division F, 232; divisions G and H, 870; in K and L, 109; making a total of 2714 cellars used as dwellings, contrary to the provisions of the Act, according to the police returns.

This was Sir Benjamin Hall's indictment of the local authorities of the London area in 1855, an indictment which would easily reach back to 1837. He was not less severe upon the central authorities, and he proceeded as follows:—

The other great grievance under which the metropolis laboured was the Commission of Sewers. They had been almost wholly irresponsible to the ratepayers. The Metropolitan Commission of Sewers have jurisdiction over an enormous area, extending in some districts much beyond the Metropolis; but there was a great portion of this area which had never come under rating, or been considered in any way by the commissioners. In 1847 the metropolitan area was divided into 7 separate districts (exclusive of the Regent's Park and Regent Street district), under the superintendence of as many separate commissioners. They were as follows:—

Commission.	Date of Commission at time of Supersedeas.	Number of Commissioners.
Westminster and part of Middlesex	Dec. 5, 1837	240
Holborn and Finsbury	—	150
Tower Hamlets	—	179
Poplar and Blackwall	—	67
Surrey and Kent	Aug. 15, 1841	280
Greenwich	Nov. 13, 1839	116
St. Katherine	Dec. 5, 1838	33

Being a total of 1065, exclusive of the directors for the time being of the St. Katherine Docks Company. Amongst the names of the commissioners were the Duke of Wellington, the Lord Chancellor, the Prime Minister, and other noblemen and gentlemen who could not attend to such matters. On the 30th November, 1847, the first 6 of the above commissioners were superseded, and 6 new and distinct commissions were issued, one for each district, but addressed to the same body of individuals, 23 in number. On the 4th December, 1847, the St. Katherine Commission was superseded, and a new commission was issued, appointing as commissioners for that district the same 23 individuals who were named in the commissions for the other 6 districts. The amount of debt due on November 30, 1847, when these commissioners were appointed, was £64,133. Besides these commissioners there were the Regent's Park and Regent Street district, which was formed in 1824, under the provisions of statute 5 Geo. IV. c. 100, out of portions of the contiguous districts, and had a separate body of commissioners appointed under that statute. The debts did not devolve upon the Metropolitan Commissioners of Sewers, but remained a peculiar charge upon the district itself, and had been paid by the district liable. In the year 1848, the 11 and 12 Vict. c. 112, under which one Commission of Sewers was established for the whole Metropolis, excepting the City, was passed, and was brought into operation on 1st January, 1849, by the issuing of the first Metropolitan Commission of Sewers. Since that time 5 commissions have been appointed, and the debts have

constantly increased. At the time the first was appointed the debt was £63,489.

Commission.	Date of commission.	No. of commissioners.	Debt at date of expiration of commission.
			£ s. d.
1st Metropolitan	Jan. 1, 1849	34	
	They increased the debt to		659,973 0 0
2nd Metropolitan	Oct. 8, 1849	13	74,700 0 0
3rd Metropolitan	Oct. 6, 1851	11	79,938 5 6
4th Metropolitan	July 20, 1852	14	297,074 6 4
Renewed on	July 20, 1854		
5th Metropolitan	Nov. 22, 1854	16	587,074 6 4

The number of commissioners here given was exclusive of the Lord Mayor for the time being, and for other members chosen by the City of London, who were summoned only on matters affecting the City. Since the issuing of the last commission the amount of debt had been increased by a new loan of £140,000, and a contract had also been entered into for a further loan of £150,000, in pursuance of powers given to the commissioners by the Sewers Act of last session, enabling them to charge the rates with an additional debt of £300,000, so that the debt now existing, and to which the ratepayers are liable, amounted to the sum of £587,074, 6*s.* 4*d.* Thus it will appear that since the year 1847 there have been no less than seven commissions—the old commission existing in that year, a new one in part of that year, and a third in January 1849, a fourth in October 1849, a fifth in October 1851, a sixth in July 1852, and a seventh in November 1854. The cost of the establishment was something extraordinary. In 1849 the cost of management was 28½ per cent on the amount of money received, and the following statement would show the actual receipts, amount of expenditure, and cost of management in the years 1849 and 1850:—

	Receipts.	Expenditure.	Cost of management.	Per cent.
1849....	£71,623 13 10	£85,345 3 6	£22,400 17 5	28½
1850....	£91,070 6 11	£94,554 10 11	£21,104 17 0	23

Since that period the amount levied by loans and taxation has been so great, varying from £129,100 in 1851 to £194,105 in 1853, that the percentage of cost of management on the gross amount collected was less; but still the cost of management was in 1851, £16,430; in 1852, £14,551; and in 1853, £17,386. The commissioners had attempted only one great work, the Victoria Sewer, the estimate of which was £28,854, and the cost, so far as can be ascertained, £41,472; but this, it was said, falls far short of the full amount."

I need not quote further. Sir Benjamin Hall's indictment against the enormities of 1855 is too strong and too direct not to be of use at the present time. It gives us the historical aspect of early Victorian London, and it points, if I mistake not, a few lessons for the present day.

I will add a few particulars of matters not touched upon by Sir Benjamin Hall. The parishes were compelled to keep fire-engines and ladders in certain places and to provide stop-blocks and fire-cocks on the mains of the water-works, but the fire insurance companies also kept up a distinct body of firemen, chiefly selected from the watermen, and who wore the special uniform of dark-grey. Lighting by gas had recently been adopted, and there were no less than sixteen gas companies in existence for supplying this necessary of city existence. In 1846 there were 30,000 street lamps in London and only 40,000 private consumers of gas. Of drainage there was practically nothing except that supplied by each house according to the wisdom or the generosity of its owner. Public water-courses and brooks were kept to some extent from contamination by the several commissioners of sewers, but there was little attention to the claims of sanitation.

A striking example, among many worse, of the dreadful condition to which the poorer classes were reduced from the want of proper structural arrange-

ments and control is supplied by a court in Westminster called Snows Rents, between York Street and St. Ermin's Hill. The court was 20 feet wide, but the houses were mostly without yards, and the refuse, when it had become intolerable inside the houses, was deposited in the court itself, the whole central space being a pool of black stagnant filth that accumulated from time to time, and the awful stench that was engendered there cannot be conceived. There was, in fact, no drainage and no water supply. In wet weather, when the water attained a certain height in the court it found its way into an open, black, pestilence-breathing ditch in a neighbouring court. (*Health of Towns Commission*, *First Report*, p. 419.) In Southwark a still more dismal state of things is reported. In the old confined districts—courts and alleys—there were blocks of buildings which had nothing but surface drainage. In the Mint, which is the oldest part of Southwark, the people in many houses threw everything out of the windows into the back yards. In some instances there were actually no privies (*Health of Towns Commission*, *First Report*, p. 393.) In Boundary Row, Southwark, men with large boots went into the sewers and threw out the filth into the street; from thence it was carted away. More frequently the mud was thrown upon the sides of the sewers and suffered to remain.

In 1848 public attention was directed to the drainage of the Westminster Abbey precincts in consequence of an outbreak of fever in the early part of the year. It was found that the outbreak was entirely due to the horrible condition of the drainage of this spot, with respect to which nothing appeared to have been previously known. A plan was drawn, and still exists, showing the sort of drainage which existed prior to 1848, and the report very fitly terms them "extraordinary con-

structions", scarcely any portion being of the same sectional form for many yards together. All over London much the same sort of thing existed. Drainage by small sections was the plan adopted for closely-built portions of the town, cesspool drainage alone existed for all parts outside the limits of continuous building.

Water supply was, as might be expected, very inadequately attended to. The private supplies by means of pumps provided the inhabitants of the greater part of the outlying portions of what is now London, and artesian and other wells completed the deficiency from these supplies—indeed, within the past thirty years many parts of West London depended for their water supply upon the rain butts and artesian-well water distributed in buckets to the householders. In 1837, so far as the water supply was not dependent upon private wells, there were ten companies supplying the London area. Of these the oldest was the New River Company, supplying the City of London and the northern district. The capital of this company amounted at that date to £1,200,000; its revenue from supply of water was £105,000, while the number of houses it supplied was about 73,000. The Hampstead Waterworks Company, which was established in 1692, was in existence in 1837. It was bought up by the New River Company in 1855. It had in 1837 a capital expenditure of £51,842, and an income from water customers of about £7000 per annum. The Chelsea Company supplied much the same area as it does now. Its capital outlay in 1837 was only £70,000, and its revenue £23,000, while the number of houses was about 14,000. The East London had expended on works £639,000, and was drawing a revenue from its customers of £50,000 from 47,000 houses. The Grand Junction had expended on works £398,000,

and possessed a revenue of £29,000 from 9000 houses. The West Middlesex Company had expended £412,000 upon its works, and was earning a revenue of about £45,000 from 16,000 houses. These were the only companies north of the Thames. On the south of the Thames the Lambeth Company had spent upon its works £269,000, and was receiving as income about £17,000 from 17,000 houses. The Southwark Waterworks, originally established in 1771 as the Borough Waterworks, had spent upon its works about £41,000, and was receiving as income £3500. The Vauxhall Company (which amalgamated with the Southwark Company in 1845) had expended upon works about £98,000, and was drawing an income of about £9000. The Kent Company had expended £156,000, and was drawing an income of about £9500 for a population of 33,600.

It is impossible to convey an adequate idea of the condition of the water supply by the companies in 1837. Even with the evils London has now to put up with, they are not much compared with the condition of things in 1837. Supply was intermittent, and some of the companies, the Southwark, for example, supplied water "for six days in the week and a small portion on Sundays". The companies supplied in all some 197,000 houses out of a total of 262,000 houses in London, which shows a large proportion dependent upon well supplies or other private means of obtaining water. Down to 1843 there was no public water supply in Rotherhithe, all the water used by the inhabitants being taken from the tidal waters flowing up the small pools and ditches; and Kingsley did not exaggerate when near the close of his *Alton Locke* he described the water drawn up from the filthy creek for the household where the tailor's man was dying of *delirium tremens*.

In 1829 a royal commission had been appointed to inquire into the question of London water supply. This was due to a petition presented by Sir Francis Burdett to the House of Commons from the inhabitants living in the west of London, praying for an inquiry into the London water supply, and in doing this, he stated that the water taken from the river, at Chelsea, was impregnated with the contents of the great common sewers, the draining of dung-hills, the refuse of hospitals, slaughter-houses, colour, lead, and soap works, &c., and with all sorts of decayed animal and vegetable substances, rendering the water offensive and destructive to health, and which ought no longer to be taken up by any of the water companies from so foul a source. He also stated that the Grand Junction Waterworks Company had agreed to supply their customers with water from the Colne and Brent, but since 1820 had failed to carry out this agreement, and had taken their supply from the Thames at the foot of Chelsea Hospital; that the company supplied this water to over 7000 families; that the company had not fulfilled their promises to supply water at a comparatively small charge, but had increased their rate equivalent in no case to less than 50 per cent, and extending in almost all cases to 90 and 100 per cent, and had in May of the preceding year obtained the sanction of Parliament to a new table of rates by which an addition of from 50 to 300 per cent could be charged on their customers.

The report came in due course. It stated that the commissioners, having taken the evidence of the companies, and afterwards checked such evidence by collateral testimony from other witnesses and occasionally by personal examination into the facts, were of opinion that the existing state of the supply of water to the Metropolis was susceptible

of, and required improvement; that many of the complaints respecting the quality of the water were well founded; and that the supply ought to be derived from other sources than those resorted to, and guarded by such restrictions as would at all times ensure its cleanliness and purity. The report concluded by expressing a hope that a full investigation by competent persons into the remedies applicable to the existing evils, and upon the best means of conveying a sufficient supply of water of unexceptionable quality to the inhabitants of the Metropolis, would soon be undertaken, and it also stated that the interests of the public required that while the companies continued to enjoy the monopoly, their proceedings should be subject to some effective superintendence and control.

There seems to have been no action taken by Parliament on the report of this commission, but in the same year a Select Committee was appointed to inquire further into the water supply of the Metropolis.

This Committee was appointed as the result of the following motion brought forward in the House of Commons by Sir Francis Burdett: "that a Select Committee of the House of Commons be appointed to inquire into the present system of supplying water to the Metropolis, including the borough of Southwark, and into the amount of rates paid by the inhabitants". In justifying this motion Sir Francis Burdett stated that no parliamentary action had taken place on the report of the Committee of 1821, that the evils then existing had never been remedied, and that the reference to the commissioners appointed in 1827 was too narrow, as no power had been given them of pointing out a remedy for the evils complained of.

The report stated that the Committee, after having reviewed the report of the commissioners issued in

the same year with reference to the purity of the Thames supply, and having also derived facts from their own observation and experience, agreed with the commissioners "that the supply of water for the Metropolis, including the burgh of Southwark and the adjacent parishes, should be derived from a purer source than it is at present"; and in furtherance of this object, they recommended "that Mr. Telford be instructed to proceed to make such surveys as he shall think necessary in order to enable him to recommend a practical and efficacious plan of supplying the whole of the Metropolis with pure and wholesome water". The Committee then proceeded to report on the inquiry, as to the rates imposed by the different companies, and adopted in its entirety the recommendations contained in the report of the Select Committee of 1821, at the same time remarking that the public were without any protection even against a further indefinite extension of demand, there being no tribunal but the boards of the companies themselves to appeal to in case of dispute, and no regulations except those voluntarily imposed by the companies; the Committee suggested that the accounts should be submitted annually to Parliament for a few years, in order to throw light upon the question as to whether competition by the companies would be beneficial or not. Reference was made to the new table of rates alleged to have been introduced into a private bill passed in May, 1826, empowering the Grand Junction Company to levy an additional charge of from 50 to 300 per cent upon their customers, and the chairman of the company stated that this clause was introduced contrary to their wishes, and the Committee recommended the immediate repeal of the said clause.

In consequence of the recommendations of the Committee contained in its report, the House of

Commons voted in 1832 a sum of money in order that Mr. Telford might make a report upon the best means of providing the Metropolis with pure water. Two years later Mr. Telford presented his report, in which he recommended that the companies supplying the north-west of London, viz. the Grand Junction, West Middlesex, and Chelsea, should obtain their supplies from the river Verulam; and the companies south of the Thames, viz. the Lambeth, South London, and Southwark, from the Wandle. The expenses which would be incurred in this scheme were estimated at £1,777,840, and included the construction of reservoirs, covered aqueducts, connecting mains, the value of lands, and damage to various interests. It was also suggested that the New River Company should be granted power to obtain an additional supply from the Lea, some distance below Waltham Abbey. As a further result of the Committee's report, the East London Company obtained powers in 1829 to take water from the Lea above the influence of the tide; the Chelsea Company in the same year established the first large filter-bed of one acre in area, the New River and West Middlesex Companies constructed extensive settling reservoirs, the Grand Junction Company removed its source of supply from Chelsea to Brentford and formed filters there, and the Southwark and Vauxhall (amalgamated) and Lambeth Companies improved their services generally.

This Commission had adopted the statement sent to them by Dr. Bostock, and the condition of things therein described was as follows:—

"As it" (the water of the Thames) "approaches the Metropolis, it becomes loaded with a quantity of filth, which renders it disgusting to the senses, and improper to be employed in the preparation of food. The greatest part of this additional matter appears to be only mechanically suspended in it, and sepa-

rates by mere rest. It requires, however, a considerable length of time to allow of the complete separation, while, on account of its peculiar texture and comminuted state, it is disposed to be again diffused through the water by a slight degree of agitation, while the gradual accumulation of this matter in the reservoirs must obviously increase the unpleasant odour and flavour of the water, and promote its tendency to the putrid state." What Dr. Bostock reported was not too strong. It had been proved to the Commission that the part of the Thames from which the water for domestic uses was taken was "charged with the contents of more than 130 public common sewers, with the drainage from dunghills and lay-stalls, the refuse of hospitals, slaughter-houses, colour, lead, gas, and soap works, drug-mills, and manufactories, and with all sorts of decomposed animal and vegetable substances, rendering the said water offensive and destructive to health." But in spite of all this no steps were taken to enforce the conclusion arrived at by the Commission. In 1832 public attention to the quality of the water supplied was again awakened by the ravages of cholera. In 1834 a Committee of the House of Commons was appointed to examine as to the supply of pure water to the Metropolis. It merely received evidence, and did not make a report. Another Committee appointed in 1840 was equally resultless. Inquiry after inquiry, to assuage the popular indignation against the water companies, came to nothing; and it was not till 1847 that any attempt was made to bring the water supply in this country under anything like public control.

Facts such as these speak for themselves, and I will only refer to one other matter of government and public administration which had a very bad effect upon the condition of London in the early

years of the Queen's reign. I allude to the window-tax. This iniquitous and foolish tax came under the notice of the Health of Towns Commission in 1844, and was reported upon by Mr. W. E. Hickson in the following terms:—

"The present mode of assessing houses to the window-tax is unfavourable to the healthfulness of habitations by operating as a premium upon defective construction. The legislature now says to the builder, plan your houses with as few openings as possible, let every house be ill ventilated by shutting out the light and air, and as a reward for your ingenuity you shall be subject to a less amount of taxation than your neighbours. The Board is of course aware that windows are now charged by a scale, the tax increasing at an average rate of about 8*s.* 3*d.* for every window, whether large or small. Hence the number of windows in a house becomes to builders of second and third class houses a very serious consideration. Supposing a house to contain 12 rooms; if, to make these rooms cheerful and pleasant, I have put two windows in each room, and thereby ensured a current of air passing from front to back, the window-tax for that house amounts to £7, 5*s.* 9*d.*; but if I have put but one window to each room, the window-tax is but £2, 4*s.* 9*d.*, showing a difference of £5, 1*s.* per annum, and I need scarcely say that a difference of only 10*s.* per annum is quite enough to influence builders of cheap houses in trying to save such a sum. But the same considerations affect the building of even first-class houses. I have been offered a rent of £210 per annum for a house unbuilt, on condition that the plan should be altered so as to reduce the amount of the window-tax, for which the house would otherwise be liable. The consequence is, that in the majority of new houses one large window, of the largest size allowed, is made to serve the purpose of two windows; and privies, closets, passages, cellars, roofs, the very places where mephitic vapours are most apt to lodge, are now left almost entirely without ventilation. An opening only a foot square, even if intended merely to admit the air, and not

glazed against the weather, makes the house liable for an additional 8*s.* 3*d.* per annum. I spoke but lately to a man in humble circumstances who had put in his privy a single pane of glass; it was discovered by the assessor, and rather than pay the tax (the money being an object) the pane of glass was removed, and the opening bricked up. The immediate effect of the operation of the 4th and 5th William IV., cap 54, by which all occupiers of houses, if duly assessed to the window-tax in 1835, were permitted to open as many windows as they pleased without additional charge, was that everybody began improving the comfort and healthfulness of their houses by letting in more light and air, but the result has been that all who did so have found themselves caught as in a trap. A quibble was raised by the lawyers as to the meaning of the words "duly assessed", and upon one ground or another they proved that nobody was duly assessed in 1835. Those persons, therefore, who could not afford to pay the tax for their new windows, have stopped them up again, and the loudest complaints prevail throughout the country of what is termed breach of faith on the part of government. If the Commissioners would examine personally the houses in which the poor live in the close courts and alleys of the metropolis, they would be surprised at the number of dark staircases and filthy holes which, although on upper floors, are quite as ill ventilated and unfavourable to health as the cellars of Liverpool. And the permanent cause of this state of things is the option given to builders of saving money in taxation by shutting out air and light."

The London of 1837 was not, as appears from the evidence, equal to its position as capital of the empire. It was wealthy, and was rapidly developing with the wealth of the country. It was picturesque in the many remains of old buildings, in the natural beauty of the country around, and the people gloried in the new architecture of the Regent period. It possessed characteristics which appear

to us romantic as they are reproduced in the pages of Dickens and Thackeray. Much of the old ways of life still remained. City merchants still lived in the city in houses frequently as old as the period of Wren, and often, as Mr. Philip Norman has shown us, retaining the ancient sculptured or painted house sign. The old Royal Exchange was there, and so were the old Houses of Parliament and Law Courts. The Strand did not possess the new Law Courts, and it had not lost Temple Bar and Northumberland House. Shops were more quaint, something like the one last specimen in Bond Street, and the two or three remaining in St. James's Street, and a huge wooden figure of a Highlandman was to be seen standing outside the shops of tobacconists. A few of the famous London spas or wells were still in existence, for it was only on September 14th, 1837, that St. Chad's Well, near King's Cross, was sold by auction, and there was even then a brick house facing Gray's Inn Lane, having a pump-room and a large garden at the back, and Mr. Norman points out that at the corner of Rosoman Street and Exmouth Street one sees the words "London Spa" on a public-house, with that sign erected in 1835 to replace a former building (*London Signs and Inscriptions*, p. 190). Indeed, one could almost best understand the London of 1837 by describing it in terms of negation compared with modern London. And above all, there was one fatal defect. It had no government and no ideal. It drifted just as events directed, into a cholera epidemic, into a chaos which was too stupid and serious to be allowed to go on quite unchecked; and it is only in recent years that it has assumed a conscious existence, capable of definite expression and control of future developments.

Chapter III.

Trade and Commerce.

That London owes its position to the Thames is undisputed. When King James I. offended the city and threatened to remove his court to another place, the Lord Mayor boldly enough told him: "Your Majesty may remove the court at your pleasure, but, thank God, you cannot remove the river Thames" (Fuller's *Worthies*); and the following words, recited from one of the early charters, in the Act of 1 and 2 William IV. cap. 76, "that it was notoriously well known that the river Thames was so necessary, convenient, and useful to the city of London that without the said river the said city could not long subsist, flourish, or continue", sum up the position very accurately.

No impediment exists in the estuary of the Thames to the approach of vessels up the river, and the natural advantages of the situation have been added to by engineering skill in the construction of the docks.

The questions of London's growth and condition must start from its trade. Its shipping has long been of the greatest magnitude in relation to the shipping of the United Kingdom and of the civilized world, and the point of greatest importance is the position of the docks. All that has been done has been by private enterprise, and private enterprise has not had either the freedom which is necessary to its success, nor the checks which are advisable in the public interest.

The struggle, which began in 1762, of the merchants of London to obtain and control docks sufficient to meet the requirements of the port of London for commercial purposes ended in 1825,

when the St. Katherine's Docks were established as the first free docks in London. The struggle is not a creditable one. The corporation of the City, who should have headed the movement for improved dock accommodation, tried to stop it by obtaining powers from Parliament for a scheme which met with quick and ignominious failure; the merchants formed companies for the purpose of constructing docks, with special powers of aggrandisement, and therefore without the capacity for development; Parliament lent their aid to schemes which met the requirements of the moment, it is true, but which failed at every point where new departures were needed; and there was no one to set all this chaos of conflicting personal interests into the right lines. After sixty-three years of struggle something like a system was evolved, but a system which only partially met the case. The West India Docks were established in 1800, the East India Docks in 1803, the London Docks in 1805, the Commercial Docks in 1810, the Surrey Canal Docks in 1811, and the St. Katherine's Docks in 1823. This system, brought to a head in 1825, was further developed in 1850 by the construction of the Victoria Docks, in 1868 by the construction of the Millwall Docks, and by extensions of the West India Docks in 1870, and of the Albert Docks in 1888, and it is this system which has continued in existence from the accession of the Queen to the present day. A very able writer in the *Times* of 1894 thus summarizes the position:—

"The history of these docks is curious. The earliest of them, the West India Dock Company, came into existence because robberies from the shipping in the river had become intolerably prevalent, and the company received exclusive privileges and a monopoly of vessels from the West Indies for twenty-five years. The docks were opened in 1800, and in 1819 the company

was ordered to reduce its rates, having paid the *maximum* dividend of ten per cent regularly, and having accumulated a surplus of £400,000. The London Docks, opened in 1805, had a monopoly of vessels entering the Thames laden with wine, brandy, tobacco, or rice; but, owing to the heavy initial expenses, they have seldom been, even in early times, in a position to pay an adequate dividend. The East India Docks came next, with a monopoly of vessels from the East Indies. Finally, after vast opposition from the London Dock Company, the St. Katherine's Docks were constructed under the powers of a bill recognizing in its preamble 'the principle of free competition in trade, and without any exclusive privileges and immunities'. Other docks have been sanctioned since, with the result that, in the long run and for a long time, there was insane competition between the various docks. And now, at this moment it is notorious that the capital sunk in the docks is far in excess of their true and present value. In fact, it was only while the docks of London enjoyed privileges which were repugnant to every principle of modern economy that they could be regarded as profitable undertakings."

The plan of the Thames shows that all the bends of the river down to Galleon Reach, beyond Woolwich, have been utilized for docks except a small portion. Thus the London Docks stretch across the first bend below London Bridge; the Commercial Docks occupy the Rotherhithe bend; the West India and the Millwall Docks are established in the Isle of Dogs; while the Victoria and Albert Docks extend across the North Woolwich bend. Only the East India Docks are not situated in a bend of the river, and are therefore provided with two entrances a short distance apart. But with these natural advantages for dock-building, the three parallel docks of the West India Docks alone, says Mr. Vernon-Harcourt, present any symmetry of ar-

rangement; the Commercial Docks, consisting partly of timber ponds, present every variety of size and shape; and the Victoria and Albert Docks, though forming a complete design, have been constructed according to two different types. (*Harbours and Docks*, i. 491.)

The accommodation and appliances at the docks are of great magnitude. The warehouses at the London and St. Katherine's Docks are very extensive, and project over the quays, resting on pillars placed on the quays, so that the fronts of the warehouses are flush with the edge of the docks, and goods can be lifted straight out of the vessels and barges and deposited in any floor of the warehouse. These docks are also well supplied with hydraulic cranes and lifts, but they have no railway communication (Vernon-Harcourt, *op. cit.* i. 492). The London Docks are surrounded by extensive warehouses, and hydraulic power is employed for working the cranes, lifts, gates, and swing-bridges. These docks are connected with the railway on its western side, but the accommodation is not much developed (*ibid.*). The Surrey Commercial Docks have a set of warehouses devoted to the grain trade, being fitted with elevators and horizontal distributing bands for storing the grain, which is lifted from the steamers by hydraulic travelling cranes. The remainder of the docks is used for the timber trade (*ibid.* 493). The East and West India Docks are surrounded by sheds and warehouses, and the export dock and basin are served by sidings from the Blackwall Railway. On the quay, sheds with two floors have been constructed (*ibid.* 495). The Millwall Docks are joined to the Blackwall and Millwall railway system, and they possess a large granary furnished with the most modern appliances for the distribution of grain (*ibid.*). The Victoria and Albert Docks and the Tilbury Docks are also

furnished with ample appliances suitable to their requirements.

The dock system of London includes, besides these great docks, other docks, quays, and wharves. Thus, there are 36 dry docks and 7 pontoons and other kinds of smaller docks. There are also 17 legal quays, that is, quays where goods may be landed under the authority of the customs authorities; and there are 119 sufferance wharves approved for the landing of certain classes of goods, besides which there are 36 up-town warehouses and vaults. There are nine wharves used for unloading coal only, and 4 railway wharves have shipping services regularly connected with them.

This appears complete enough until one looks a little more closely into the subject. In 1894 the *Times* devoted a series of special articles to the question of the docks, and I quote the following important passage from the opening article:—

"No problem outside the scope of party politics is of more serious importance than that which is indicated in the words 'the ports of Great Britain and Ireland'. But the subject is not one which receives full attention from the men whom the electors of the country choose as governors, for the simple reason that, inasmuch as it has not yet come within the scope of party politics, members of parliament have not been encouraged to attack it. A complicated and intricate problem does not commend itself to the party politician or his advisers, who are in agreement, and from their narrow point of view in wise agreement, that the best way to secure votes is to make a pretentious display upon some petty question which appeals to passion, prejudice, and sentiment, while to attempt the study of serious problems, upon the solution of which the prosperity of the community depends, is to court neglect in the first place, and, after neglect has been conquered by persistence, to earn that unpopularity which is the usual reward of

those who bring a troublesome subject to the front. Fortunately, however, for the trading community at large, circumstances have conspired to thrust the question of the ports upon public attention in such a manner that even the partisan politician must be roused into wakefulness. With these circumstances it will be sufficient for the moment to deal in general outline. In the first place, schemes for the complete or partial municipalization of ports are being thrust forward in a very persistent fashion; in the second place, a number of docks have fallen, or seem to be likely to fall, into the hands of railway companies, some of which are shipowners into the bargain; in the third place, the doctrine that the agencies which provide facilities for the transport of goods must not, if they have obtained protection or assistance from the State in securing their positions, be able to show anything approaching to undue preference, has been recognized with so much emphasis in recent statutes relating to railways and canals that the application of a similar doctrine to the ports, which are the nostrils of the breath of the country—that is to say, of its trade—has become a mere matter of time. Finally, and this is perhaps not the least important point, there is such a bewildering variety of systems and allowances at various ports that it is, according to the statement of many competent authorities, utterly impossible, after reference to all the best books of port and harbour charges, to prepare a tabular statement showing the comparative expense of sending similar vessels with similar cargoes—let me say, for example, coastwise—to the various ports of the kingdom, and having their cargoes dealt with in similar fashion. It should be added that, apart from difficulties presented by varieties of system and management, there are some anomalies in matters of charging rates and dues which are common to all ports, and others which are confined to single ports, that there is an endless variety in the constitution of governing bodies, and that the Port of London, which ought for many obvious reasons to be the most prosperous and the best governed port in the world, is under chaotic control, and is losing its hold upon the

trade of the country at a pace which gives ample cause for apprehension."

This chaotic control of the Port of London is only one example out of many of the disadvantages from which London suffers from the want of unity. It leads to almost incalculable mischief. To summarize the facts, I will use the third of the series of articles in the *Times* already referred to. It is, says the writer, "the deplorable and incontrovertible fact that no port of any considerable size in the United Kingdom is so grossly mismanaged as the Port of London". The government of the Port of London is divided amongst the Thames Conservancy with 24 members, the Dock Companies' Directors with upwards of 100, the London County Council with 119 members, the Trinity House Elder Brethren 27 in number, besides which there are local vestries, lesser railway docks and wharves, with all their members and directors, and there are the Crown, the Admiralty, and the City Corporation. We have thus a rough enumeration of the various bodies controlling the Port of London. Be it observed, in the first place, that there are several geographical definitions of the Port of London. The legal port, defined by the Commissioners of 1665, extends from London Bridge to the North Foreland. The jurisdiction of the Thames Conservancy extends, so far as the tidal waters are concerned, from Teddington to Yantlett Creek, on the Medway. This body was empowered by the Act of 1857 "to regulate the fishing in the Thames, to remove its obstructions, cleanse the river, repair its banks and breaches, license wharves, piers, stairs, and other projections, and remove such as are unlicensed, grant licenses for the erection of mills and waterworks", and so forth; and by an Act of 1894 its powers are considerably increased.

Trinity House performs certain functions over another area, and the London County Council has certain duties in relation to that part of the Thames within the County of London and that part of the lower reaches which it uses for its sewage outfalls.

The natural result of this multiplicity of control is an extensive subdivision of responsibility and great difficulty in fixing the blame for things left undone upon the persons who ought to bear it. Let us be content, then, to say that the state of the river, the pollution of its waters, the difficulties in the navigation which are not caused to disappear, as would surely be the case if they existed elsewhere, and the enormous expense of the port, are due not to the shortcomings of any particular body, or group of bodies, but to the existence of a system, or lack of system, which is complicated beyond all belief. Apart from the fact that the work done cannot be done well when it is done at all, it is clear that the cost of multiple control is, and must be, enormous. For this multiple control there is not the slightest justification beyond the bare fact of its existence. "Nearly all the harbour trusts of the United Kingdom," says the writer of the preface to Mr. Schönberg's little book, "in addition to the control of their respective harbours, manage their own docks, establish their own ferries, build their own bridges, and deepen their own rivers, conserve, light, buoy, build protective works, piers, and lighthouses, all out of a gross revenue about one-third that of the docks of London."

To the bad financial effects of this multiple control are to be added the bad administrative effects. It is hardly to be credited that down to so recent a period as 1888 the estuary of the Thames was practically made the dust-bin of London! and surely no other city in the world would tolerate so scandalous a state of things. In consequence of complaints from

those engaged in the fisheries, an inquiry was made into the matter, and it was reported upon by Mr. C. E. Fryer, Inspector of Fisheries. The report stated that at least a third of the London vestries, &c., barged away their dust, one parish alone sending 40,000 loads annually. The useless portion of this dust, estimated at a third of the whole, was simply shot over from the barges into the river, or its estuary, at the most convenient places, and as many as thirteen barges at a time have been observed near the Nore thus engaged. The quantity of dust thus disposed of was estimated at 78,000 tons annually. The Thames Conservancy and other authorities acted so as to drive the barges making the deposit outside their limits, but had no power to prevent the dust being shot sufficiently near their boundaries to admit of portions of it being carried back into and polluting their waters. Under section 83 of their Act of 1894, the jurisdiction of the Thames Conservancy, for the dredging, cleansing, and scouring of the river, and other purposes, has been extended to the Nore lightship, and under section 92 power is conferred to proceed in cases where materials are deposited outside this extended limit, when likely to be carried back to the Thames. The *Report of the Lower Thames Navigation Commission*, 1896, states that for many years the Thames Conservancy had deposited waste dredgings in Dead Man's Hole, about three miles above the Leigh Middle Shoal. In an area of 200,000 square yards more than 2,000,000 cubic yards had been deposited since 1878, sufficient to raise the bottom of the whole area by many feet. Recent surveys, however, show that while other portions of the river have become shallower, the depth of Dead Man's Hole has not been reduced, from which it is concluded that the solid material deposited has found its way into other parts of the

river or estuary to the injury of the navigating channels, both westward and eastward, and it appears to be placed beyond question that to deposit the material as has been done results in the distribution of the larger portion of it through those parts of the river most favourable to accretion. The widening of the river below Star Elbow was also found to be mischievous, and to avoid further emphasizing this mischief, it was recommended that no further removal of the northern foreshore or shallow banks of the river should be allowed between Star Elbow and Shoeburyness, and that frontage owners should be encouraged to prevent the removal of any ground immediately above high-water line. The deposits by the London County Council, contractors, and others, in Barrow Deep, 20 miles below the Nore, were regarded as important, and as needing careful watching. From the beginning of 1878 to 30th September, 1894, the Thames Conservancy dredged away 2,196,760 cubic yards of material from the navigable channel of the river, between London Bridge and Gravesend, at a total cost for working expenses and repairs of £158,658, and of £22,925 for tugs, dredgers, &c. The average annual expenditure for dredging this section of the river was thus £10,681, and the average annual quantity of material removed was 129,221 cubic yards, the average cost of removing which was 1.65*s*. per cubic yard. The average quantity of material removed annually would cover a square mile to a height of an eighth of a foot. Dredging for ballast is also carried on by private persons for sale, under license from the Conservators, who receive about £1100 annually for the privilege.

If Londoners are to wake up to the enormous interests which are at stake from the present want of system in conducting one of the elementary duties

of the community, they must do so speedily. London has succeeded in spite of obstacles, not by reason of facilities. While Manchester deems it advisable to spend millions upon the creation of a port and dock, while the governments of foreign countries deem it proper to spend national moneys upon the improvement of their docks, as at Havre, Rouen, Antwerp, Hamburg, and others, while trade is being diverted or changed as a consequence of the revived competition of foreign countries, London stands still, and will probably only awaken to the occasion at the last stage. No doubt each of the authorities interested in the matter work diligently in the public interest. There is ample proof of this. But diligence cannot make up for unity of action and of policy, and this, more than anything else, is needed.

Let me now turn to the shipping of the port. The number and tonnage of vessels registered under the Merchant Shipping Act, 1868, as belonging to the Port of London, on the 31st December in the following years, according to Board of Trade Annual Return, will be found on pages 79 and 80.

The change from small to large vessels, and the gradual replacing of sailing by steam vessels, are most marked. In 1874 the total tonnage of vessels registered as belonging to the port was 1,201,108 tons; the steam-vessels amounted to only 30·9 per cent of the total number, and 41·5 per cent of the total tonnage; the average tonnage per vessel being 416. In 1896 the total tonnage was 1,661,079 tons, an increase of 38·3 per cent; the steam-vessels amounted to 59·6 per cent of the total number and to 83 per cent of the total tonnage, and the average tonnage per vessel had increased to 606 tons, or by nearly 46 per cent. The total tonnage of 1896, as compared with that of 1894, shows an increase of 56,921 tons, equivalent to 3½ per cent.

The number of ships and their tonnage recorded

Tonnage.	1874.					
	Sail.		Steam.		Totals.	
	Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.
Under 50.. ...	669	23,256	212	5,297	881	28,553
50 and under 100	250	16,904	55	3,822	305	20,726
100 ,, 200	170	25,567	75	11,508	245	37,075
200 ,, 300	123	30,406	43	10,394	166	40,800
300 ,, 400	138	48,249	43	14,899	181	63,148
400 ,, 500	108	48,705	59	26,649	167	75,354
500 ,, 600	78	42,835	71	39,028	149	81,863
600 ,, 700	74	48,536	57	36,994	131	85,530
700 ,, 800	63	46,950	38	28,536	101	75,486
800 ,, 1000	103	91,705	76	68,099	179	159,804
1000 ,, 1200	104	113,763	54	58,943	158	172,706
1200 ,, 1500	74	97,448	41	54,619	115	152,067
1500 ,, 2000	34	56,235	47	81,624	81	137,859
2000 ,, 2500	3	6,362	17	37,463	20	43,825
2500 ,, 3000	1	2,730	—	—	1	2,730
3000 and above ...	1	3,389	3	20,193	4	23,582
Total ...	1,993	703,040	891	498,068	2,884	1,201,108

Tonnage.	1884.					
	Sail.		Steam.		Totals.	
	Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.
Under 50.. ...	691	23,709	332	7,088	1,023	30,797
50 and under 100	287	18,508	67	4,577	354	23,085
100 ,, 200	99	14,268	95	14,107	194	28,375
200 ,, 300	58	14,692	58	14,146	116	28,838
300 ,, 400	57	20,049	58	20,575	115	40,624
400 ,, 500	60	27,183	65	29,518	125	56,701
500 ,, 600	37	20,306	53	29,057	90	49,363
600 ,, 700	33	21,781	44	28,444	77	50,225
700 ,, 800	21	15,955	51	38,533	72	54,488
800 ,, 1000	50	45,016	112	100,518	162	145,534
1000 ,, 1200	52	57,369	112	123,373	164	180,742
1200 ,, 1500	48	64,895	130	172,415	178	237,310
1500 ,, 2000	41	69,376	60	103,344	101	172,720
2000 ,, 2500	11	24,264	17	37,688	28	61,952
2500 ,, 3000	1	2,651	12	32,222	13	34,873
3000 and above ...	1	3,389	3	20,191	4	23,580
Total ...	1,547	443,411	1,269	775,796	2,816	1,219,207

Tonnage.	1894.					
	Sail.		Steam.		Totals.	
	Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.
Under 50.. ...	549	18,711	395	6,261	944	24,972
50 and under 100	272	18,591	73	5,054	345	23,645
100 ,, 200	73	10,648	93	14,141	166	24,789
200 ,, 300	20	4,891	64	15,742	84	20,633
300 ,, 400	12	4,216	50	17,566	62	21,782
400 ,, 500	14	6,380	55	25,095	69	31,475
500 ,, 600	12	6,636	51	28,211	63	34,847
600 ,, 700	10	6,556	31	19,929	41	26,485
700 ,, 800	10	7,585	34	25,870	44	33,455
800 ,, 1000	21	18,704	114	102,106	135	120,810
1000 ,, 1200	22	24,362	108	119,519	130	143,881
1200 ,, 1500	46	61,708	185	250,244	231	311,952
1500 ,, 2000	50	85,102	199	345,401	249	430,503
2000 ,, 2500	16	35,134	66	145,611	82	180,745
2500 ,, 3000	3	7,997	36	96,011	39	104,008
3000 and above ...	—	—	21	70,176	21	70,176
Total ...	1,130	317,221	1,575	1,286,937	2,705	1,604,158

Tonnage.	1896.					
	Sail.		Steam.		Totals.	
	Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.
Under 50.. ...	557	18,669	424	6,357	981	25,026
50 and under 100	287	19,729	74	5,057	361	24,786
100 ,, 200	66	9,291	104	15,869	170	25,160
200 ,, 300	16	3,843	71	17,339	87	21,182
300 ,, 400	9	3,143	46	16,127	55	19,270
400 ,, 500	13	5,912	53	24,153	66	30,065
500 ,, 600	9	4,927	49	27,080	58	32,007
600 ,, 700	6	3,868	33	21,230	39	25,098
700 ,, 800	10	7,570	27	20,558	37	28,128
800 ,, 1000	12	10,919	96	86,065	108	96,984
1000 ,, 1200	18	20,321	105	115,979	123	136,300
1200 ,, 1500 / 1500 ,, 2000	87	132,876	401	635,794	488	768,670
2000 ,, 2500 / 2500 ,, 3000	18	41,198	114	270,951	132	312,149
3000 and above ...	—	—	35	116,254	35	116,254
Total ...	1,108	282,266	1,632	1,378,813	2,740	1,661,079

as having entered the port in the eighteenth and the early part of the present century afford interesting comparative evidence of the growth of London commerce. The figures are as follows:—

Trade.	18th Century.					
	Beginning.		Middle.		Close.	
	Ships.	Tons.	Ships.	Tons.	Ships.	Tons.
Foreign.....	1,335	157,035	1,682	234,369	3,269	557,248
Home.....	5,562	278,100	6,396	511,680	10,175	1,205,650
Totals.....	6,897	435,135	8,078	746,049	13,444	1,762,898

Trade.	19th Century.					
	1820.		1830.		1840.	
	Ships.	Tons.	Ships.	Tons.	Ships.	Tons.
Foreign...	4,210	777,858	5,178	951,729	6,728	1,284,220
Home.....	Not fully recorded		19,057	2,436,701	21,619	2,850,813
Totals...	—	—	24,235	3,388,430	28,347	4,135,033

The information is only available in regard to ships *entered*, but the increase shown may perhaps be taken as an approximate indication of the proportionate increase in the total ships and tonnage entered and cleared in the years referred to. Among the ships shown for the close of the 18th century were included 3676 colliers, of an aggregate tonnage of 656,000 tons. In 1825 this number of colliers had increased to 6564, of an aggregate tonnage of 1,856,606 tons, or more than the whole entered trade of the port at the close of the 18th century. At that time all the ships in the port were moored in the river, and discharged and took in their cargoes there. The river was, in consequence, so crowded with shipping, that a vessel frequently took a week to get from London Bridge to Black-

wall. It was this state of things, and the gigantic system of robbery which prevailed on the river, which led to the Parliamentary inquiry into the Port of London in 1797—the evidence collected containing much valuable and most interesting information—which resulted in the incorporation of the first dock company (the West India), whose docks were opened 1802. This and the subsequent development of dock accommodation immensely increased the trade of the port, which, previously to the West India Docks being opened, was thought to have attained the limit which the provision at that time admitted. Up to the year 1840 the home trade of the port was of far greater magnitude than the foreign, and it was not until 1860 that the latter began to constitute the greater part of the trade of the port; now it is nearly double the home trade, and it is gratifying to observe that the proportion of British ships and tonnage engaged in it are yearly increasing in a much greater proportion than the foreign ships and tonnage.

In 1860 London had 21¾ per cent of the total foreign trade of the country, that is, 4,526,012 tons out of an aggregate of 20,837,918 tons. In 1896, while the aggregate foreign trade of the country had reached 71,182,887 tons London had received only 14,493,353 tons, or 20¼ per cent, thus showing a small proportional decrease. The Danish trade, in particular, had been diverted to the following ports:—

Ports.	Aggregate of Denmark Tonnage in		Difference.
	1860.	1896.	
Leith	33,942	183,684	149,742
Newcastle	150,474	278,754	128,280
Southampton	2,729	30,621	27,892
Glasgow	708	16,530	15,822
Liverpool	14,997	24,968	9,971

These figures show that London is not keeping up its proportion of trade. So long as this trade finds its way to other British ports the country is not, as a whole, concerned; but if it indicates that the foreign trade is beginning to be diverted into foreign ports, that London is no longer the sole clearing-house of Europe for all eastern trades, then the question becomes a serious one, not only for London but for the country. The statistics are not of course to be taken as affording conclusive proof one way or another. Other things have to be taken into consideration. But they do suggest that the time has arrived when this subject must be examined into most minutely and carefully, and particularly whether the enormous increase in the trade of London, indicated by the tonnage figures of 1860 and 1896, does not show that the accommodation of the port needs very considerable augmentation.

The number and tonnage of vessels in the different London docks, and the number of vessels in the various dry-docks for repair, &c., as well as the number, tonnage, and nationality of the vessels

Docks.	Number of Vessels.			Tonnage of Vessels.			For repair, outfit, &c., or to lie up.
	Steam.	Sailing.	Total.	Steam.	Sailing.	Total.	
East India.....	3	2	5	13,926	2,630	16,556	—
West India.....	11	18	29	18,495	17,729	36,224	8
Tilbury.....	10	1	11	34,656	554	35,210	4
London	8	3	11	9,428	1,854	11,282	—
St. Katherine's.	6	2	8	6,935	305	7,240	—
Royal Victoria..	21	2	23	60,834	945	61,779	3
Royal Albert....	18	1	19	78,686	278	78,964	—
Millwall.....	18	3	21	21,060	1,125	22,185	—
Surrey Commercial.....	12	43	55	11,112	26,072	37,184	—
Regent's Canal.	—	18	18	—	8,679	8,679	—
Total	107	93	200	255,132	60,171	315,303	15

which entered and cleared from the port on a particular day—6th November, 1896—will give the best idea of the extent of the shipping trade of London. This information given here in tabular form has been ascertained from the Dock Directory and the Customs House Returns.

Besides this there were 10 steam and 4 sailing ships in the various dry-docks of London for repair, &c., 6th November, 1896.

Chapter IV.

The Industries.

The occupations of the people of London, outside what may be termed the natural occupations of trade and commerce, are more numerous than is generally supposed. There are very numerous and extensive industries carried on, and these occupy the next place in our consideration.

The general condition of the industries in 1837, noted in the first chapter, showed us some decaying and some developing. This process has gone on ever since. And first of all there is the important industry of ship-building, once a very important part of the trade of London.

Mr. Chas. Booth, in his *Life and Labour of the People* (vol. v.), thus describes the decline in this industry in the Port of London:—

"There was a time when the banks of the river below London Bridge formed the great ship-building yard of the world; now the ship-building has all gone, although to the last the Thames work retains its reputation for being the very best. In the iron ship-building trade, the Thames, formerly so noted for its work, now does next

to nothing; in the midst of the general depression, one or two firms only which have a specialty in the manufacture of torpedo-boats, &c., are doing well. The tendency for some years past, in regard to the engineering and metal trades generally, has been for London to become more and more exclusively a repairing shop. Each year the quantity of new work turned out becomes smaller, owing to the circumscribed space available, the heavier rent, rates, taxes, greater cost of labour, and in most cases the higher cost of carriage of raw material. These combined causes so heavily handicap London in the competition with provincial rivals, that even for work to be used in London, it is only under some special conditions that a *bona fide* London firm can secure an order."

The difficulty of launching the much larger vessels of recent years may also, Mr. Booth thinks, have helped this decline; but the race for cheapness, he considers, has been the main cause, and provincial rivals, having every facility for producing at less cost, have succeeded in the contest. The Board of Trade returns do not appear to give particulars of ship-building earlier than 1867, and for that year the aggregate tonnage built at the Port of London, exclusive of those built for foreigners, was only 5667 tons, or 3291 tons, nearly 37 per cent, less than the aggregate of 1896, namely, 8958 tons, and 3061 tons in excess of the lowest aggregate of all—that of 1884. The aggregate of 1870 corresponds with that of 1867, and it would appear that the aggregate for 1874, 20,930 tons, is quite an exceptional one, and should therefore be excluded in the effort to determine whether there has been a decline or otherwise in the ship-building industry within a recent period. Vessels built for foreigners should also be excluded in this comparison, because of the considerable variations in their number at different periods, due to circumstances not con-

nected with the conditions obtaining in London. So far as it has been possible to investigate the facts it would appear that ship-building is now decidedly a more prosperous industry than it was thirty years ago, and shows a tendency to increase. How much further back than 1867 it would be necessary to extend the inquiry in order to discover the time when the banks of the Thames were the "ship-building yard of the world", would be a difficult matter to determine; and we are not assisted by the fact that the building of metal ships was then comparatively in its infancy, and the old materials and methods of construction were almost as much used as they had been for years previously.

There was no industrial census prior to 1851, and it is therefore difficult to trace the changes of industrial enterprise with any detail. In an Appendix I have printed an analysis of the London Directory of 1837, of the London census of 1851, and of the London census of 1891. It should be borne in mind that the analysis for 1837 is of employers only, that for 1851 and for 1891 is of employers and employed, and further, that the London of 1837, though practically the entire London as it then existed, is not technically the same area as that of modern London. The difference in this respect would not, however, be of importance.

The manufacturing industries in 1837 consisted of chemical manufactures, implement-makers, artificial-flower makers, cabinet-makers, builders, boat-builders, blacking manufacturers, mathematical-instrument makers, furriers and leather-dressers, watch and clock manufacturers, coach-builders, coopers, dyers, engineers, glove manufacturers, gold and silver workers, hat manufacturers, paper-makers, pen manufacturers, pianoforte makers, pottery makers, printers, silk manufacturers, soap manufacturers, tinplate workers, tobacco-pipe

makers, and other smaller industries. There were altogether 16,536 different employers of labour in connection with the industrial work of London, each of whom employed a large number of persons in the various parts of the manufactory. This is sufficient to indicate the extensive character of London industries, apart from the ordinary domestic and professional occupations of a large and wealthy community.

The examination of the list in the Appendix will excite the interest of all who care to watch the progress of industrial life in our midst. New industries have been added and old industries have been given up. The extensive operations of match manufacturing, jam making, pickle manufacturing, electrical engineering, and the enormous development of the jewellery, pottery, and other art industries, have wrought extensive changes in the industrial development of London, and few people realize to what a large extent London depends upon its manufacturing industries.

Among the professions of 1837 are a few which tell us of the changing order of things. There are enumerated, for instance, "13 cuppers" and "28 dentists and cuppers". These entries tell us of the advance of surgery in all its branches, not only by the fact that "cuppers" now no longer exist, but that the operation is no longer carried on by surgeons, while, on the other hand, dentistry has assumed the position of a separate profession of very considerable importance. The "86 proctors" no longer exist, this branch of the legal profession having been abolished and the work thrown open to solicitors; and there are other employments strange to modern times.

There is indeed an enormously large number of persons in London engaged in the learned professions—law, medicine, and the like. In 1851,

according to the census enumeration, the number was 25,097, but in 1891 it was 100,731. This has a considerable influence upon the wealth and position of London, for it is the centre of the whole kingdom in such matters, and with the ever-increasing facilities for travelling, is becoming more and more the training ground for all branches of high professional occupation. In 1837 it is noticeable that journalists are not specially enumerated, and that the trades connected with books and newspapers only numbered about 800 different businesses. In 1891 some 62,000 persons were employed in this branch of work, besides 34,000 persons directly engaged in literature, fine arts, and sciences. It is, I believe, an admitted fact that the training in London in all branches of the learned professions is considered to be of far greater value than that to be obtained elsewhere.

The comparatively scanty information which is available upon so important a feature of London life as its industries is sufficient at all events to detect a faulty point in our census statistics, and it is to be hoped that this will be mended in the future. Nothing is more important to a community than to be able to consciously observe the tendency of its development. In the meantime, all that can be accomplished by an exhaustive examination of the facts contained in the two censuses of 1881 and 1891 has been done by Mr. C. Booth, and I shall not hesitate to quote his masterly summary here (see *Life and Labour of the People*, ix. 58–64).

"Between 1881 and 1891 the population of London increased 10½ per cent, but the numbers employed in this or that trade were affected in very varying degrees. Those engaged in making surgical, scientific, and electrical instruments, for instance, increased no less than 113 per cent, while, on the other hand, shipwrights decreased 56½ per cent. If we look back further, we

find that the augmentation in the numbers of scientific-instrument makers has been continuous, amounting to 246 per cent since 1861. This increase has been exceeded only by that of the paper trades, in which the total addition to the numbers employed was 250 per cent. Shipwrights have as continuously declined, the reduction being no less than 72½ per cent since 1861. Where there is an increase, it has, as a rule, been a fairly steady one during the whole thirty years; and where a decrease, that also has been persistent. An exception to this rule is to be found in the building trades, in which only the last decade shows a decrease, the explanation being, not that the trade has really declined, but that its operations have been partly transferred to districts beyond the census boundaries. Hat and cap makers form another exception, as after decreasing rapidly up to 1881, they show 12 per cent increase in the last decade, undoubtedly due to the rise of the cloth-cap industry. In the case of seamen, too, a rapid decline has been followed recently by a slight increase; and, on the other hand, merchants, bankers, and brokers, whose numbers were greatly augmented from 1861 to 1881, have decreased slightly since, due, perhaps, to the development of limited liability companies. The changes are often significant as showing the drift and direction of modern industry, and the extension of old or creation of new demands. A distinction, however, must be drawn between trades which work for a wide market, and those which, like the cab and omnibus service, find their customers entirely in London. Among industries of the former description, we find no increase in the last decade equal to that already mentioned as being shown by the scientific-instrument makers (which is connected chiefly with the extended demand for electrical appliances); but paper manufacture (that is, the making of paper boxes and bags, and the cutting of envelopes) shows an increase of 48½ per cent; india-rubber and floor-cloth, 35 per cent; chemical workers, 32 per cent; engineering, &c., 31½ per cent; and soap and candle makers, 29½ per cent. All these trades, excepting the last, lie in the full

stream of modern development, and in connection with the trade of candle making, we have already noted the very remarkable fact that the more light we have the more we seem to require, so that the demands for electricity, gas, petroleum, and candles all increase together. A test of the amount of work connected with the receiving and handling of merchandise is perhaps afforded by the carmen, who have increased 36½ per cent in the decade, and no less than 198 per cent since 1861. These are very eloquent figures, which certainly do not bear out the view that trade is leaving the Port of London. Coal-porters show an increase of 50 per cent, due partly, no doubt, to the general development of trade, but more to the substitution of coal-consuming steamers for sailing vessels. In any case, the figures are strong evidence of the extension of business, of which another proof is found in the increase of commercial clerks by 28½ per cent in the decade, and by no less than 205½ per cent since 1861."

Mr. Booth next discusses the trades which are leaving London. These are:

"milling, sugar-refining, &c., which show 20½ per cent reduction in the decade, or 49 per cent in the thirty years; silk and fancy textiles, in which the reduction is 21½ per cent since 1881, and no less than 61½ per cent since 1861; coopers, whose trade has slipped away, chiefly in the last ten years, in connection with the substitution of metal drums for wooden barrels, and the making of the latter by machinery; and finally shipwrights, who have suffered in the revolution which, in replacing wood by iron and steel in ship-building, has transferred this trade to the North of England. All these trades work for a large market."

Other changes in the census totals indicate alterations in business methods, and Mr. Booth instances

"undefined factory labour, which increased 79 per cent in the decade, following increases in the preceding periods, so that the total addition (calculated on a small

original total) is no less than 309½ per cent; besides this, artisans, &c., undefined, have increased by 43 per cent since 1881. Here we undoubtedly trace the application of science to manufacture, with the result that in certain trades the contribution of skill passes into new and fewer hands,—the hands of those who direct rather than those who do the work,—and thus tends to be dissociated, perhaps for ever, from the old skill of the handicraftsman."

This revolution is connected with the introduction of machinery, and Mr. Booth next notices some important facts in this connection.

"The increase in machinists (78 per cent), which reflects the application of the sewing-machines to many trades, has been naturally accompanied by a decrease amongst seamstresses. With tailors, also, the addition (30 per cent) is connected mainly with a changed method of business, which, by immensely cheapening the production of clothes, has found a wider market. In fact a new branch of trade has been created, in which room has been found for a large proportion of the Jewish immigrants, by whom, or by whose co-religionists, this industry has been principally built up."

Next Mr. Booth touches upon the trades in which can be traced both the gradual movement of modern industry and a special extension of London demands. These are:

"printing, with 33½ per cent addition since 1881, and no less than 124½ per cent since 1861, and book-binding, with an increase of 23 per cent in ten years, or 104 per cent in thirty years. Books, papers, and periodicals printed in the metropolis go all over the world, but a large part of the demand lies within the boundaries of London, and consequently we find a considerable growth in the number of booksellers and newsagents, amounting to 32 per cent in ten, or 66 per cent in thirty years. Of a similar character is the increase in the number of makers of musical instruments and toys, an increase which, as

showing the capacity of the population for spending money on the smaller luxuries of life, may perhaps be taken as a further indication of prosperity. Milk-sellers have grown 31 per cent, indicating, surely, a widespread advance in comfort, and possibly also in sobriety. Though greatest in recent years, this rise has been continuous, so that milk-sellers have increased, since 1861, by 82 per cent. This increase has been accompanied, and perhaps partly caused, by a revolution in the trade, London dairies having been superseded by railway-borne milk far superior in quality to that formerly supplied. No less satisfactory than the increase in the retailers of milk is the decrease in the numbers of publicans and their assistants, which, though only ½ per cent in the last decade, is 17½ per cent since 1861—a great change when compared with 50 per cent increase of population."

Mr. Booth concludes his very remarkable summary of industrial London as follows:—

"On the whole, the changes in the industrial constitution of London point to, and are no doubt closely connected with, a general increase in and concentration of wealth. That 'wealth accumulates and men decay' is in some sense a true verdict as regards London, but it is not the whole truth, for, thanks on the one hand to better regulation, and on the other to a healthy influx and efflux of population, a wholesome balance is maintained, and it may even be hoped that the better influences prevail."

This evidence is very important, and it is derived from a close and special analysis of the census returns, which is the special characteristic of Mr. Booth's book. When we note the remarkable development of large retail businesses with branch establishments all over London, of the enormous concerns in Oxford Street and Regent Street, and add that the development of the stores system of

trading, of which Mr. Whiteley was the forerunner, coupled with cheapness of parcel carriage, has made London the centre for a large retail business with customers living many miles beyond its boundaries, we have noted, I think, the chief features of industrial London.

But there is a very interesting and special branch of London industrial life, which is not so well known as it ought to be, and which demands most careful attention at the hands of those who conduct the affairs of London, namely, the various industries connected with the markets.

London differs in one very striking particular from perhaps every other important city in that it has no general retail markets. In Paris and other large continental cities, and in most of the towns throughout England, general markets at which the retail purchaser can obtain his domestic supplies are generally to be found on a large scale. Practically no market of this kind exists in London, all the authorized markets being mainly wholesale markets or depôts, to which the producer or importer sends his produce for sale to the retail tradesman, and at these markets the actual consumer rarely purchases. The only semblance to retail markets which exist in London are the informal markets, established by the costermongers in the public streets, which, as is well known, are quite unauthorized.

The authorized London markets have, in nearly all cases, been established by royal charter. The oldest of these charters appears to be that granted to the Corporation of London by Edward III. in 1327. This charter confirmed the liberties, customs, and privileges of the City of London, and prohibited the establishment of any market within seven *leucæ* (about 6⅔ miles) of the City walls, but this latter right has obviously not been main-

tained, as in addition to two charters granted by Charles II., for Covent Garden and Spitalfields markets, other markets have been established within the prescribed distance under Act of Parliament. The Borough, Columbia, and Shadwell markets may be cited as instances. It was stated by the City Remembrancer, in giving evidence before the Royal Commission, that "in recent times, the policy of the Corporation has been to recognize and assist in every way the establishment of retail markets all over the metropolis"; but the Corporation certainly opposed the Islington Market, the Shadwell Market, and the Stratford Market, and their action in the case of the Deptford Market was a virtual opposition to any other but themselves being the market authority.

The history of the City Markets is not a pleasing one. It is the history of a struggle for private rights, not for municipal duties. The City has established and maintained nine great markets, two of which, viz. the Metropolitan Cattle Market at Islington, and the Foreign Cattle Market at Deptford, are outside the City boundaries, established under special Acts of Parliament. The markets actually within the City are the Central Markets at Smithfield, containing meat, poultry, provision, and general, and fish markets; Leadenhall, which is a general market; Billingsgate for fish; and Smithfield Hay Market. Besides these, there are the Corn Exchange, the Coal Exchange, the Wool Exchange, and the Metal Exchange.

The other principal London markets are:

Covent Garden (vegetable, fruit, and flower market), granted by royal charter.

Spitalfields (vegetable and fruit market), granted by royal charter.

The Borough (vegetable and fruit market), granted under statute.

The Great Northern Railway Company (potato market).
The Midland Railway, Euston Road (potatoes and vegetables).
Columbia (now a potato market), granted under statute.
Shadwell (fish market), granted under statute.
Portman Market (general).
Greenwich Market, granted under charter and statute.
Woolwich Market, granted under charter.
Whitechapel Hay Market, granted under statute.
Cumberland Hay Market, granted under statute.
Hide and Skin Market.

Of the two City markets situated in the county area, the first is the cattle market at Islington. Having become utterly inadequate under private management, an Act was passed in 1851, putting an end to it. This Act, and an amending Act passed two years afterwards, enabled the Corporation to erect the cattle market at Islington, which they did, at a cost of £450,000. The Act now governing the market was passed in 1857. The market covers an area of about 75 acres, the market proper consisting of 15 acres. The market was opened in June, 1855, for the sale of cattle, sheep, and horses. There is also a "scrap" market for the sale of carts, manufactured goods, old iron, and various odds and ends. The method of conducting the business in the Metropolitan Cattle Market is as follows:—The consignments of cattle, &c., which arrive by the various railways or from the Corporation's own lairs in the immediate vicinity of the market, or from the neighbouring lairs licensed for the purpose, are allotted a certain space in the market. When fully set, the market will hold 6600 bullocks and 36,000 sheep, and the lairs will accommodate about 3000 head of cattle and 10,000 sheep. It is said to be the largest cattle market in the world. The "scrap" market in connection with the cattle market is an offshoot of the old Smithfield Market.

Formerly there used to be what was called a pedlars' market at Smithfield, and when that was removed they gradually drew on to the Metropolitan Cattle Market, where accommodation was set apart for them. The tolls, which are fixed by Act of Parliament, are 6*d.* per head on bullocks, 1¼*d.* on sheep, 3*d.* on calves, 1¼*d.* on pigs, 7½*d.* on horses, and 3*d.* on donkeys. The supplies for the market are drawn from all parts of the United Kingdom and from all countries which are not scheduled by the Board of Agriculture. The market supplies, as a rule, all the home and midland counties, Lancashire and Yorkshire, and in the autumn many of the English watering-places. The market days are Mondays and Thursdays for cattle, sheep, and pigs, and Fridays for horses, mules, donkeys, and milch cows, and for the "scrap" market; but nearly all the cattle business of the week is done on Mondays.

In 1866 the Metropolitan Board of Works showed by investigations made by them that the cattle plague was being introduced into London by cows imported from Holland, and in 1867 an Act gave power to the Privy Council to regulate the landing of cattle brought from any place out of the United Kingdom. Places were authorized by the Act to be provided for the reception of such cattle. In 1868 the Privy Council asked the Board of Works if they would establish and maintain a landing-place and market for the landing, slaughter, and sale of foreign animals, and on the Board assenting to this, a Bill was framed to confer the necessary powers on the Board. The City, however, interposed, and stated that they were prepared to establish such a market, and without having recourse to the imposition of any rate to maintain the same, out of the revenue to be derived from the tolls, wharfage, and the rents of any such market.

In 1869 the Contagious Diseases (Animals) Act

was passed, which repealed the Acts of 1848 and 1867, and declared the local authority to be the Board of Works, except within the City area. This Act contained special provisions relating to the importation and landing of foreign animals, and declared that the Mayor, Aldermen, and Commons of the City of London should, for the purposes of that part of the Act, be exclusively the local authority in and for the Metropolis, and gave them power, provided they exercised it by the 1st January, 1872, to acquire wharves and lairs for the landing, reception, sale, and slaughter of foreign animals. In default of the City providing such a market before January 1st, 1872, the Board of Works might acquire and erect the same with the consent of the Privy Council.

Acting under these powers, the Corporation established the Foreign Cattle Market at Deptford. This market is used for the slaughter and sale of cattle imported into the Port of London from scheduled countries—countries in which contagious disease in animals is known or suspected to exist. All animals coming from such countries must be slaughtered within ten days, exclusive of the day of landing. The cattle are consigned to commission salesmen, who sell the animals alive by private contract. The wholesale and retail butchers who purchase these animals have in most instances a slaughter-house in the market area, for which they pay a yearly rental, but some of the animals are killed in common or public slaughter-houses in the market. The trade of the market is increased or diminished according as the Board of Agriculture increases or diminishes the number of scheduled countries. The market is held on Mondays and Thursdays, but is open every day for the reception, lairage, and slaughtering of cattle. The market was opened in January, 1872, and in that year there

were 38,129 cattle, 817 calves, 124,508 sheep, and 173 swine brought into the market. In 1882 there were 105,964 cattle, 21,638 calves, 778,775 sheep, and 11,705 swine. In 1891, 154,127 cattle (including calves) were brought into the Foreign Cattle Market, 196,570 sheep (including lambs), but no swine. The charges for landing, wharfage, lairage, and market dues are as follows:—Beasts per head, 5*s.*; calves per head, 2*s.*; pigs per head, 1*s.*; sheep per head, 9*d.* The lairs are supplied with a constant supply of water, and the market authorities are responsible for the delivery of the animals in the first instance to the consignee, and afterwards to the purchaser, in such numbers as he may require for slaughter. The animals brought by all continental steamers are landed direct on the jetties, but if the steamer is too large to get alongside, the Corporation have a steamer to tranship the animals, for which they charge a uniform rate of 3*s.* per head. The ratio of the tolls charged in the market to the value of the animals sold is as follows:—$\frac{1}{73}$ of the value in the case of a bullock; $\frac{1}{56}$ in the case of a sheep; $\frac{1}{36}$ in the case of a calf; and $\frac{1}{44}$ in the case of a pig. The supplies for the market are drawn from the following countries:—The United States, cattle and sheep; from Holland, cattle, sheep, and pigs; from Belgium, sheep; from Germany, sheep; from Spain, cattle; from Portugal, cattle; and from Schleswig-Holstein, cattle and sheep. A little over two-thirds of the carcasses of animals killed at Deptford are sent to the London Central Meat Market, and a large quantity goes to Whitechapel Market. An inspection of the animals is made by the Inspector of the Board of Agriculture, and if disease exists, the portion of the market where it exists is immediately closed; the animals are slaughtered under special restrictions; and all the hides, fat, offal, &c., are disinfected.

The large group of markets known as London Central Markets has been gradually erected by the Corporation partly on the site vacated by the removal of Old Smithfield Cattle Market to Islington.

The Meat and Poultry Markets are situate between Farringdon Road, Snow Hill, and St. Bartholomew's. The meat market was opened in 1868, and the poultry market in 1875. The meat market has a superficial area of 155,226 feet, which is equal to 3 acres 2 roods 10 poles 44 feet. This area is not, however, all available for market purposes, as there is a public right of way through the centre, and the various market avenues. The poultry market has an area of 64,698 feet superficial, or 1 acre 1 rood 37 poles 175 feet, and has underneath a cold-air store for the accommodation of the carcasses of 80,000 sheep. The tenants in the markets are chiefly commission salesmen and carcass butchers. The latter, who are fewer than the former, buy and slaughter the cattle and bring them to their own shops in the market to sell. In 1869 the tonnage of the provisions brought into the markets was 127,991 tons, in 1879 it was 212,988 tons, and in 1887 it was 259,384 tons, so that there has been a steady and continuous increase from the first. A uniform toll of a farthing on every 21 lbs. weight is charged. The shop space allotted to the trade in the meat market is 102,880 feet, and in the poultry market 35,302 feet, so that the rental in the meat market is at the rate of about 1½*d.* per foot per week, and in the poultry market the rental amounts to 2*d.* per foot superficial on the area of the shop floor. The supplies to the markets come from nearly all parts of the world. In 1876 the first importation of American meat came into the market to the extent of 5513 tons. In 1881 it had reached 27,439 tons, and in the same year Australian and New Zealand dead meat were first sent

to the market to the extent of 565 tons. The market supplies the whole of London and surrounding places, besides many of the provincial towns, even in northern counties of England. University towns and places of seaside and summer resort receive their supplies of meat largely from this distributing centre. The market is held daily, except Sundays, and is wholesale, except on Saturday afternoons, when the working-classes generally visit the markets and make their purchases.

The Provision and General Market also forms a part of the group of modern structures erected by the Corporation at Smithfield. It occupies the site in the angle formed by Charterhouse Street (south side) and Farringdon Road. Under the main buildings is an extensive railway goods depôt. The market is connected by a covered-in thoroughfare with the poultry market on the east side. This structure was originally used as a fish market. This, however, was unsuccessful, and another fish market has been erected on the south side. It is at present ostensibly a provision and general market, but is actually being occupied chiefly for the sale of meat, and appears to form, with the poultry market adjacent, an auxiliary to the main meat market. Provisions form but a small portion of the business of the market, and the term "general" can fairly be applied only to the shops which front to Farringdon Road. The tolls levied are the same as in the meat and other markets in the group, viz.:—

"For any quantity of meat or other provision not exceeding 21 lbs., ¼*d.*; and ditto in proportion for any greater quantity for weighing.

"Not exceeding 1 cwt., ½*d.*; every additional cwt., ½*d.*"

The Fish Market forms another of the group of

markets erected by the Corporation of the City of London at Smithfield. It is situated upon the triangular site formed by the intersection of Long Lane with Snow Hill, having the apex in Farringdon Road. The London, Chatham, and Dover Railway connection between Ludgate Hill and Aldersgate Street runs underneath the market. The frontages to streets are ornamental walls only and not shops; all the shops face inwards. There are in all 28 shops with small rooms over; some of the shops are very small, 13 of them are at present unoccupied. The whole of them are suited only for retail trade, and the greater number are now being used for the sale of shell and dried fish.

The market is small and does not appear to be extensively used. It is, however, fairly well adapted for the purposes of a retail fish market. There is a vacant space on the east side which could be utilized for extension to about double the present extent.

Farringdon Market, which was the old City market for fruit and vegetables, having been sold, the Corporation have erected an adjunct to the central market for the sale of fruit and vegetables.

Leadenhall Market occupies a site within the angle formed by Gracechurch and Leadenhall Streets, and is probably a site once belonging to Roman London. It opens directly into Gracechurch Street, and indirectly into Leadenhall Street *via* Whittington Avenue, both of these being fairly broad entrances. It is approached also through Bull's Head Passage and Ship Tavern Passage, both from Gracechurch Street, and also through Lime Street Passage and Leadenhall Passage on the east. These four approaches are very narrow and quite inadequate; they are also lined with shops, which, while not standing within the strict market area, practically form part of the market. The

market contains about 120 shops, and not any open stalls. The shops vary very considerably in size, from about 12 feet by 20 feet to about 60 feet by 35 feet, some of them being excellently adapted for the large business that is carried on, and over all of them are dwelling-rooms or warehouses. There are two large and three or four smaller taverns within the area. The footways within the market proper are covered in with iron and glass roofs, and there is one carriage road through the centre which is also covered in in the same manner. All the shops are occupied, and there is every sign of a large and flourishing business, the market being often densely crowded. The commodities sold are chiefly poultry (wholesale) and meat, game, fruit, vegetables, fish, general provisions, live birds, dogs, rabbits, and other small animals, in which a retail trade is carried on.

Billingsgate Market is situate between Lower Thames Street and the river, within the City of London. The market is entirely for the sale of every description of fish, both salt and fresh water, shell-fish of all kinds, and salted fish when in season. The fish is conveyed to the market both by water and by land. The water-borne fish is caught mainly in the North Sea, and is collected from the various fishing fleets by steam-vessels, known as steam-carriers, which deliver at the quay or wharf at Billingsgate. Of recent years the quantity of water-borne fish has increased, owing doubtless in a great measure to the facilities afforded by the steam-carriers. The fish is packed in loose ice in boxes which are technically known as "trunks". These contain on an average about 90 lbs. of fish. The boxes are taken out of the vessels by porters licensed by the Corporation and placed upon the forms provided for the purpose in the market, which are rented by the various fish-carrying companies.

The companies are the Grimsby Ice Company, the Great Northern Steam Fishing and Ice Company, the Steam Fishing and Ice Company of Hull, the North Sea Trawling Company, and the Great Yarmouth Steam Carrying Company. The whole of the fish brought by these companies is disposed of by auction by the companies themselves. The land-borne fish is that fish which is caught around the coast of Great Britain and Ireland. It is collected at the various seaports and despatched to London by train. From the various railway depôts it is conveyed to the market in railway vans and by carrying companies. The land-borne fish is disposed of chiefly by commission salesmen to whom it is consigned, partly by auction, partly by private sale. The land-borne fish is packed in "trunks" similar to the water-borne fish, but a large quantity also comes in boxes called "machines", in each of which about two tons of fish are packed in loose ice. These "machines" are brought from the railway depôts to the market on trollies. The total tonnage brought into the market has increased nearly 15 per cent within the five years 1883–7, there having been 119,670 tons in 1883, and in 1887, 137,029 tons. The toll on vans with four wheels containing fish is 2*s.* 6*d.*; on carts with two wheels, 1*s.* 6*d.*; on row-boats, 9*d.* each; on vessels under 5 tons, 2*s.*; under 10 tons, 4*s.*; of vessels of 10 and under 20 tons, 8*s.*; of 20 tons and under 35, 14*s.*; of 35 and under 50, 20*s.*; of 50 and under 75, 30*s.*; of 75 and under 100, 40*s.*; and for every ton over 100 tons, 6*d.* There is also a toll of 1*d.* per cwt. on fish not coming by vehicle or boat, *i.e.* fish coming into the market from shops or from any other fish market, such as Shadwell. Altogether the tolls average about £5500 per annum. According to statements made by two costermongers, and by Mr. Packer, secretary to the

London Fish Trade Association, it is alleged that wet fish pay toll, and if taken away and cured or fried, and brought back again, a second toll has to be paid, but this is denied by Mr. Le Poer Trench, the superintendent of the market. The supplies for the market are drawn from the coasts of Great Britain and Ireland, Holland, Norway, Sweden, and occasionally from France. All parts of England are supplied from Billingsgate, and every day a quantity of fish is even sent thence to Paris and the south of France. The market is held every day of the week except Sundays, but the busiest days are Mondays and Fridays.

The Coal Market also belongs to the Corporation, having been granted by an act of George III. (cap. cxxxiv. of 43rd year), and rebuilt under the provisions of an act of 1846. The Corn Exchange is in Mark Lane and was built in 1881.

Smithfield Hay Market, situate in West Smithfield in the City of London, is used exclusively for the sale of hay and straw. The business is conducted entirely by salesmen who sell principally upon commission. The tolls charged are 6*d.* per load on hay, no toll is charged for straw, but 1*d.* is charged for entering the sale of both hay and straw. The market, which supplies principally the metropolitan area, is held on Tuesdays, Thursdays, and Saturdays, and is entirely wholesale. It is held practically in the open streets around Smithfield, no accommodation being provided for people attending it, and the carts simply taking up positions one against the other, and making their own stands.

This too brief account of the City markets cannot be closed without quoting a passage from the evidence given by Mr. John Kemp before the Royal Commission on London government in 1894:—

"Two things about the City markets deserve to be

noticed. First, they, or at least some of them, notably Billingsgate and the Central Meat Market, are not municipal markets at all. It is not their object to supply food to the inhabitants at a reasonable distance from their homes, in the most direct manner, and therefore at the most moderate prices, and in quantities convenient and suitable to the needs of the purchasers. They are great wholesale businesses, vast commercial enterprises carried on for the supply, through middlemen, of the demands not only of the metropolis, but of a large part of England, and even foreign countries. Both Mr. Goldney, the City Remembrancer, and Mr. Scott, the City Chamberlain, stated in their evidence before the Royal Commission on Market Rights and Tolls in 1887, with apparent satisfaction, that meat and fish are supplied from the Central Meat Market and from Billingsgate to an area of perhaps a hundred miles round London, and fish, at any rate, is supplied from Billingsgate to Paris, Nice, Cannes, Mentone, and other places in the south of France. The Corporation professes that it confers great benefits upon the whole metropolis by its management of the City markets, but it does not provide municipal markets at all, such, for example, as those of Berlin, but has used its practical monopoly to establish vast centralized exchanges for wholesale dealing in marketable commodities. It may be that this is a good thing to do, provided that the other and primary duty is not left unperformed; but even in that case such a course is only defensible if the whole of the profits arising from it are fairly and openly devoted to the benefit of the inhabitants at large. This leads to the second observation upon the City markets. The real profits of the markets are not shown as profits by the accounts, because in most cases the amount of money borrowed upon the credit of the tolls of each market is very much larger than was required for the construction of the market itself, and has really been expended upon street improvements under the name of approaches. These improvements were no doubt necessary, but they concern the City chiefly, and too large a share of their cost has to be paid in the form of a tax

upon food by the inhabitants of the whole metropolis outside the City."

I now turn to the markets not held by the City Corporation. Covent Garden Market, which is, and has been for years, the great central market of London for vegetables, fruit, and flowers, is in the parish of St. Paul, Covent Garden, and forms part of the settled estates of the Duchy of Bedford. The market rights were acquired by a charter granted to the Earl of Bedford by Charles II., and dated May 12th, 1661. The charter is as follows:—

Grant to Earl of Bedford.—Patent Roll (Chancery) 22, Chas. II., part 3, No. 28.—The king, &c., unto all to whom, &c., greeting. Know ye that we of our special grace and from our certain knowledge and mere motion have given and granted, and by these presents for us our heirs and successors do give and grant to our right, trusty, and well-beloved cousin, William, Earl of Bedford, that he, his heirs and assigns, surely for ever have hold and keep and shall and may have hold and keep one market within the parish of St. Paul, Covent Garden, in our County of Middlesex, in a certain place there commonly called the Piazza, near the Church of St. Paul, Covent Garden, extending from the aforesaid church towards the east, four hundred and twenty statutory feet, a little more or less, and from the wall of the garden, Anglicé the garden wall, there of the said east towards the north, three hundred and sixteen statutory feet, a little more or less, as well within the railings there as without on any day in any week throughout the year (except Sundays and Christmas Day), for the buying of all and sundry fruits, flowers, roots, and herbs whatsoever, and to last through all those days for ever, together with all liberties and free customs, tolns, tolls, stallages, piccages, and all other profits, advantages, and emoluments, whatsoever, to such market in any wise belonging, pertaining, arising, or proceeding or with the same usually had or enjoyed.

To have hold and enjoy the aforesaid market and all and singular the rest of the foregoing by these presents above granted or mentioned as to be granted to the aforesaid William, Earl of Bedford, his heirs, and assigns, for the sole and proper use and behoof of the said Earl, his heirs, and assigns, for ever. And this without account or anything else to us our heirs and successors therefore to be rendered paid or made. Wherefore we will, and by these presents for us, our heirs and successors, do provide and command that the aforesaid Earl, his heirs, and assigns, by virtue of these presents will freely, lawfully, and quietly have hold and keep, and shall and may have hold and keep for ever the aforesaid market and all and singular the rest of the foregoing aforesaid, according to the tenour and true intention of these our letters patent without molestation, perturbation, grievance, or contradiction from us, our heirs or successors, from any sheriffs, eschaetors, bailiffs' officers, or ministers of us, our heirs or successors, or of others whomsoever. And without any warrant, writ, or process from us, our heirs or successors for the future in that behalf to be procured or obtained, although no writ of *Ad quod Damnum* in that behalf shall have issued, nor any inquisition thereupon taken or returned shall exist. Whereas express mention, etc. In witness whereof, etc. Witness, etc. Witness the King at Westminster on the twelfth day of May.

By writ of Privy Seal.

Although the market is open, and business transacted in it upon every day in the week except Sundays and Christmas-day, the principal market days are Tuesdays, Thursdays, and Saturdays. Upon the mornings, however, of most week-days, the entire space up to the edges of the foot-pavements in front of the houses that surround the market is filled by carts and wagons containing produce. The streets leading to the market are also occupied, and the entire scene is quite one of the pleasing

sights of London. The market area is defined by the letters patent, and extends to the fronts of the houses and buildings on each side, including the foot-pavements and roadways. An act for regulating the market was passed in 1813 (53 Geo. iii. cap. 71). Previously to 1822, when the Act of George IV. was passed, the market was conducted in the open air. The present buildings were erected and the original open area broken up under the provisions of that Act, and in accordance with the plan annexed to it. Immediately after the passing of the Act the buildings were commenced, but the roof over the long market was not erected until 1875. The central avenue consists of about twenty shops. These are used for the purpose of exposing fruit, flowers, and vegetables, and selling them by retail. Besides these shops there are other rooms or buildings used principally as counting-houses by the salesmen, and there are cellars which are occupied as store-rooms. All these shops, counting-houses, buildings, and cellars are let on weekly tenancies, the Duke of Bedford keeping all the buildings in repair, and paying all rates, taxes, and outgoings. The chartered market, which covers an area of 3 acres 34 perches, being 420 feet from east to west and 316 feet from north to south, having become quite inadequate for the rapidly-increasing business, the Duke of Bedford, who is also the owner of the adjoining properties, has from time to time allocated certain portions of the surrounding property to market purposes. Within the chartered quadrangle there is a considerable space that is not covered, which usage has made a thoroughfare, and the market business is carried on therein. But the streets immediately leading into the markets on all sides, north, south, east, and west, are continually blocked with wagons that cannot be brought within the chartered quad-

rangle. The southern area cleared by the Duke and dedicated to the market was for the purpose of obviating the necessity of any wagons standing in the public streets, but it does not accomplish its object.

The retail trade in Covent Garden is quite inconsiderable, owing, perhaps, to the fact that so many first-class fruiterers' and florists' shops have sprung up of late years in the West End. The market is the great centre for the distribution of special commodities which go to all parts of the Metropolis and to many of the Midland towns that cannot obtain local supplies. Goods are even bought in Covent Garden Market and taken to the Borough Market to be re-sold. Covent Garden is therefore pre-eminently a wholesale market into which goods are bought in bulk, sold in bulk, and distributed in bulk. This causes on account of both vendors and purchasers a considerable vehicular traffic which tells heavily upon the neighbourhood.

By letters patent of the 29th July, 1682, in the 34th year of Charles II., the king granted to John Balch, his heirs and assigns, the right to hold a market on Thursdays and Saturdays in every week "in or near a place called Spittle-square" (*in sive juxta quodam loco vocato le Spittle Square*), in the parish of Stepney, together with all dues, tolls, piccage, stallage, and other profits, advantages, and emoluments whatsoever appertaining in any wise to such market. At the time of this grant Balch was the lessee of a block of land then called "Spittle Square" (another part of Spitalfields parish is now known as Spital Square), under a lease for eighty years, dated 17th December, 1672, and subject to a covenant not to build on the land, and he had also acquired the greater part of the reversionary interest therein. Balch died in 1683, and by a decree in a Chancery suit his successors in title were discharged

from the covenant not to build. At some time after the grant of the charter of Charles II., the block of land of which Balch was lessee was laid out by him or his successors in title as a market-place intersected by streets, named North Street, East Street, South Street, and West Street, which were known as the four inner streets of the market. The land immediately surrounding "Spittle Square" was afterwards laid out in streets, named Lamb Street, Commercial Street, Brushfield Street, and Crispin Street. These form the four outer streets of the market. A second charter by letters patent, dated the 22nd September, 1688, in the 4th year of James II., after reciting the charter of Charles II., and that all the title and interest of John Balch in the same markets and premises had come to George Bonn, granted to him two markets, one on Monday and another on Wednesday in every week instead of the market on Thursday appointed by Charles II.'s charter, and confirmed the market granted by such charter to be held on Saturday. This charter of James II. was made void by 2 Wm. and M., session 1, c. 8, on the grounds that the charter was granted during the interval between the taking away of the City rights by the Stuarts and their restoration by Act of Parliament in the first session of William and Mary. It was held that it could not be taken that the City had assented to the grant of that charter, because it was granted at a time when their rights had been forcibly taken away, and the Act of William and Mary, which restored the City rights, declared void all charters granted in the reign of James II. which infringed the liberties of the City. The present market, which is used for the sale of vegetables, fruits, and roots, is open every day; but the market days, when the growers and market-gardeners attend, are Tuesdays, Thursdays, and Saturdays.

A fruit and vegetable market was first established in the Borough High Street by virtue of royal charter granted by King Edward VI. to the Mayor, Commonalty, and Citizens of London, and by the 29th Charles II. it was enacted that the market should continue to be held in that locality. It was, however, represented in the 28th year of George II. by the City authorities that the market held in the High Street, which was a great thoroughfare for carriages and cattle passing to and from the counties of Kent, Surrey, and Sussex, had become a nuisance owing to the number of carts, stalls, and stands which were congregated there for market purposes, and the Mayor, Commonalty, and Citizens of London desired, for the convenience and accommodation of the public, to give up the market. An act was therefore passed (28 Geo. II., c. 9) which provided that from and after Lady Day, 1756, no market was to be held in the High Street. In the same year a further act was passed (the 28 Geo. II., c. 23), which recited that it was necessary, for the benefit and accommodation of the inhabitants of the Borough of Southwark and the neighbouring towns and villages, that a market should be continued at a place as convenient as possible to the Borough High Street, and that the churchwardens, overseers, and inhabitants of the Borough of Southwark were desirous to erect and maintain such a market, and had found a suitable place for the purpose. Commissioners were appointed under this act to set out the site of the ground for a market, and the churchwardens, overseers, and eleven of the most substantial inhabitants of the parish of St. Saviour's who were from time to time to be chosen and appointed by the vestry of that parish, or any seven or more of them on behalf of themselves and the inhabitants of the parish, were empowered to purchase such ground. In the 30 Geo. II., cap. 31,

this ground was more specifically described, and the area to be cleared for the market included a piece of ground called the Triangle, and some buildings and courts adjoining, as well as a portion of the houses, ground, and buildings known as Rochester Yard, which formerly belonged to the Bishop of Rochester. This site formed the nucleus of the "New or Borough Market". The market was greatly enlarged and rebuilt about 1860 or 1861, when the extension of the South-Eastern Railway to Cannon Street and Charing Cross was constructed. The area is now nearly three acres in extent, and its management is vested in twenty-five trustees, consisting of six churchwardens, eight overseers, and eleven inhabitants, appointed by the Vestry of St. Saviour's. It is situated off the Borough High Street, and is bounded by St. Saviour's Church and Winchester Street on the north; on the east by Green Dragon Court; on the south by part of Stoney Street, and the block of buildings between Stoney Street and Bedale Street; and on the west by part of Stoney Street.

The market is open every day of the week except Sundays, and there appear to be no limitations as to the days and hours on which it may be held. The recognized market days are, however, Tuesdays, Thursdays, and Saturdays, and the market lasts generally from about 3 a.m. to 8 a.m. The accommodation consists of 116 inner standings, 16 market-gardeners' cart stands, 3 casual pitching grounds, 39 cellars, 8 shops, and 10 warehouses. This accommodation appears, however, to be very inadequate for the increasing demands, and serious complaints were made to the Commissioners in 1887 as to the lack of sufficient space and the difficulty of access to the market.

The Great Northern Railway Potato Market was established about 1845 on the site of the original

London passenger terminus of the Great Northern Railway on the west side of York Road, King's Cross.

In the market are thirty-eight warehouses with small sidings at the back, into which the trucks containing the produce are run, for unloading. The goods sold are potatoes, turnips, celery, and cabbage. The market is not an open one to which the ordinary consumer has free access, but is on the private ground of the company, inclosed by walls and gates, and only wholesale dealers are supplied. When leaving the market, the buyer gives up to the company's constable stationed at the entrance-gates a ticket showing the nature and quantity of the goods he is taking away. The warehouses, all except three of which are occupied, are held by twenty-eight salesmen at an annual rental varying from £35 to £65. The majority of these salesmen have also a shop or warehouse at Covent Garden, Spitalfields, or the Borough Market. In addition to the produce which arrives and is sold at this depôt, a large quantity of vegetables is also received by wholesale dealers, who send it at once to one of the large markets, such as Covent Garden or Spitalfields.

The Midland Railway Company's Vegetable Market, Euston Road, St. Pancras, was built in 1888, in the Midland Road, with a frontage and entrance in Euston Road. The commodities brought by rail to the market are mostly potatoes, turnips, and carrots, and the quantity averages, during the winter months, about 7000 tons a month, while in the summer the monthly tonnage is much less. There are nineteen warehouses let to salesmen at rents varying from £55 to £65 per annum, and provision is made by which the railway trucks, loaded with produce, can run into these warehouses.

Columbia Market is situated between Hackney

and Bethnal Green Roads, near to Shoreditch Church, and in the midst of a large, thickly-populated district, the inhabitants of which are chiefly very poor. It was built by the Baroness Burdett-Coutts, under the powers given by the Bethnal Green Market and Approaches Act, 1866. It was instituted not to compete with or displace any then existing market, but solely from a philanthropic desire to provide a good market for the neighbourhood, which had none except the stalls in narrow and crowded streets. It was originally intended for a general market, but failed to attract dealers, chiefly because costermongers prefer freedom from restraint or regulation, and immunity from rent and other charges, which they enjoy in the streets. It is believed that costermongers have never used it at all, and shopkeepers could not prosper in it, probably because of the want of customers which the absence of costermongers involved. The building was afterwards used as a fish market, the Baroness making many efforts to establish trade, even to the extent of chartering a fleet of vessels to supply it with fish. This endeavour also failed, mainly on account of the absence of direct railway or water communication, but also by the strong combined action of Billingsgate dealers, who, among other means of opposition, would frequently buy up the whole stock of the best fish immediately on its arrival and take it down to Billingsgate for re-sale. The Baroness then established a branch of this market at Billingsgate itself both for landing and selling purposes, but this step appears to have been ill-advised, as it only intensified the opposition. These efforts failed, and the fish trade ceased altogether. The buildings are now practically empty and disused, the only exception being a very small wholesale potato trade carried on in the extreme western portion. Here the charge

made is only 2*s.* 6*d.* per week per standing, and the total income from this source does not amount to £50 per annum. The market area and buildings consist of a large central quadrangle of about 183 feet by 183 feet for stalls, covered in with an iron-and-glass roof having gas and electric light fittings pendent therefrom; on two sides are eleven shops facing inwards, and two taverns. Only one of the shops is occupied (by a cabinet-maker), but the taverns are both let. A large basement for storage paved with granite sets is under the quadrangle, and over the shops are suites of dwelling-rooms, all of which are occupied by weekly tenants. A piazza runs along all the sides of the quadrangle. On the north side is a large hall designed for use for meetings, &c., or as a reading-room, and there are offices and other accommodation. Adjoining the main building on the west side, there is an auxiliary market now in partial use for the sale of potatoes. This is covered in by an iron-and-glass roof, and is bounded on the north and south by substantial iron railings with ample entrance-gates in Columbia Road. On the north side, exterior to the hall, is a large open space, bounded by strong iron railings and gates in Baroness Road, forming an excellent standing ground for wagons and barrows, or affording an addition to the market proper in fine weather.

Shadwell Market is a fish market belonging to the London Riverside Fish Market Company. The market was constructed under authority given by private acts in 1882 and 1883, and was first opened for business on November 9th, 1885. It covers an area of 4½ acres, and is situate 1½ miles lower down the river Thames than Billingsgate. The market building has a riverside frontage of 224 feet, with a ground space of 22,000 feet, which is the market proper, the rest of the 4½ acres being a

paved space for standing room for vans and buyers. The City Corporation opposed the establishment of the market on the ground that the company were infringing the rights conferred by a charter of Edward III. Notwithstanding this charter, the right to establish a market at Shadwell was given by Parliament, and an important precedent was thus established. The market appears well placed for steamboats bringing fish to London; and there is good accommodation for vans bringing fish from the different railway termini to stand and unload.

Greenwich Market occupies a small covered area situated between Nelson Street and Clarence Street in the parish of Greenwich. By letters patent of William III., dated July 18th, 1700, the king granted to Henry Earl of Romney, and his heirs and assigns, the right to hold a market on Wednesdays and Saturdays in every week. The market, with all tolls and profits arising therefrom, afterwards became vested in the Commissioners of Greenwich Hospital, to whom it now belongs, and is now let to Mr. James Percy of Hammersmith, the Commissioners reserving to themselves the shops situated on each side of the market. The chief, and practically sole, business is the sale of market-garden produce grown in the county of Kent, to small traders and shopkeepers who reside in the neighbourhood of Greenwich, and there are also two or three dealers in foreign fruit and vegetables. The market days are Tuesdays, Thursdays, and Saturdays, but sometimes in the strawberry season, when there is a glut, every week-day becomes a market day. The market is open between the hours of 4 a.m. and 9 a.m. in the summer months, and 5 a.m. to 10 a.m. in the winter. The business seems to be diminishing rather than increasing, but has not fluctuated to any great extent during the last few years.

Woolwich Market is situated in Beresford Square, the open space in front of the entrance to the Royal Arsenal, Woolwich, at the end of Wellington Street and the New Road. This space measures 180 by 140 feet, and has shops on three sides, the Arsenal forming the fourth. The property in rear of these shops consists mostly of cottages inhabited by the working-classes, and the locality is fairly thickly populated. The market rights, granted by letters patent in the sixteenth year of the reign of King James I., to Sir W. Barne, Knight, and Hugh Lydyard, Esq., were purchased by the Woolwich Local Board of Health from Sir Spencer Maryon Maryon Wilson, Bart., on the 13th of June, 1887, with a piece of land called the "Market Place" in High Street, Woolwich. The market rights extend over the whole town and parish. The Woolwich Board in September, 1888, appointed this site as a place for the standing of stalls and barrows, providing also a certain number of portable stalls. Tolls are levied, varying from 2*s.* 6*d.* to 3*d.*, according to the nature of the vehicle or receptacle used, on every wagon, cart, barrow, basket, or hamper bringing produce to and standing in the market. Stallages and rents are payable for standing places for barrows whether movable or fixed, by persons selling from trays or tins or other receptacles, and by persons selling within the market district, but not at the market place. These stallages and rents vary from 2*s.* 6*d.* per day; the stallage payable on a movable stall is 3*d.* per day, which is paid by persons hawking goods through the market on trays and tins. The market does a small wholesale trade in the early morning for the convenience of the local costermongers, but the principal trade is retail, and is mainly on Saturday, there being only about a dozen barrows on the ordinary week-days. These, however, appear to do a fairly good business, more

especially at the times when the workmen are leaving the Arsenal. The following is a list of the stalls:—

(*a*) *Perishable goods*—Butcher's meat, 4; vegetables and fruit, 11; fish, 8; flowers and plants, 13; sweets, &c., 8: total, 44.

(*b*) *Other goods*—Boots, brushes, &c., 3; ironmongery, 3; earthenware, 1; floorcloth, 1; haberdashery, 4; old clothes, 1; old books, 2; live birds, 1; live gold-fish, 1; caps, 1; fancy goods, 1; sticks and umbrellas, 2; pictures, 2; shooting stand, 1: total, 24.

Some of the stall-holders are also occupiers of shops in adjacent back streets, and are apparently in fairly good circumstances. A number of those selling non-perishable articles come from other parts of London, but the majority belong to Woolwich, and a large amount of business is done. About one-half of the area of the square is occupied by the market, leaving at the narrowest point about 30 feet available for vehicular and general traffic, to which no inconvenience is caused. The foot-pavement varies in width from 4 to 16 feet. At the widest part about 4 feet is occupied by flowers and plants, but no inconvenience is caused to the traffic. The market is a convenience to the general public, and also to the shopkeepers, who consider that it brings a large amount of trade to the neighbourhood.

Plumstead Market is held in that part of High Street, Plumstead, which extends from Cage Lane to a little beyond Garibaldi Street, a distance of between 400 and 500 yards. It is a wholesale market where garden produce is supplied direct from the market-gardener, and by wholesale dealers, to retailers who come from the surrounding districts of Woolwich, Belvedere, Erith, Dartford, Bexley, and Crayford. It was first established in 1853, and

originated through one or two market-gardeners' wagons stopping while on their way with produce to London. It has steadily increased, and now there are usually about twenty wagons laden with vegetables and potatoes and three with fruit, and this is considerably increased at certain times when strawberries and peas are in season, &c.

Portman Market is on the north side of Church Street, Edgware Road, in the parish of St. Marylebone, and extends from Carlisle Street on the west to Salisbury Street on the east, and from Church Street on the south to the back of houses on the south side of Huntsworth Terrace on the north. It has an area of about 31,500 square feet. There are three avenues to the market, viz. western, central, and eastern. In each of these there are several shops, of which some are let to weekly tenants who use them as dwellings, the rents ranging from 2*s.* 6*d.* to 3*s.* 6*d.* per week; others are used as workshops, and some are closed up. The shops in the western avenue are let with the shops abutting on the market on the east side of Carlisle Street, but very few of these are used in connection with the market on market-days. The vendors chiefly occupy stalls, or have spaces allotted to them and lay their goods for sale on the pavement. The market has been established since 1853, and at one time was a very good market; but during the last eight or ten years it has gradually been declining, and at the present time very little business is done. The market-day is on Friday, and it is open from about 8 a.m. till dusk in the evening, there being no fixed hours. The goods sold are of a very miscellaneous character, and include vegetables, fruit, flowers, second-hand clothing, earthenware, glass, ironmongery, haberdashery, caps and hats, locks, &c., but there is very little demand for them.

Whitechapel Hay Market is exceedingly ancient.

It is believed to have been in existence since the time when the City of London was enclosed by walls, and it originated in the congregation of farmers' wagons outside the walls upon the country road. The market has no area of its own, but extends along the entire length of Whitechapel High Street, and into portions of Commercial, Leman, and Goulston Streets, the middle portions of the streets being occupied by the hay vehicles, and a margin left on each side for ordinary traffic. The market-days are Tuesday, Thursday, and Saturday. From Lady-day to Michaelmas the market closes at 3 p.m., and from Michaelmas to Lady-day at 2 p.m. The governing body is the Markets Committee of the Vestry of St. Mary, Whitechapel. There is a practical monopoly in the market exercised by four or five local salesmen, who claim and secure the whole space for themselves and their clients, and the Vestry Committee has permitted this monopoly to develop and become established. The market is therefore not an open one, and all "outside" producers are precluded from dealing.

Cumberland Market occupies an open space situate between Albany Street on the west and Stanhope Street, Regent's Park, on the east, and at the north end of Osnaburgh Street in the parish of St. Pancras. It covers an area of about 5000 square yards, and was established at the time when the old Hay Market at St. James's was abolished, about sixty-eight years ago, under the act of 11th Geo. IV., cap. 14, dated 3rd May, 1830. Under this act the Commissioners of Woods and Forests obtained power to appropriate certain open spaces in the parish of St. Pancras known as York Place, Clarence Gardens, and Cumberland Market, or any parts of them which they thought proper, for market purposes, and were empowered to appoint the days on which such market should be held, to levy

tolls in accordance with the schedule attached to the act, to allot spaces for the purchase and sale of different commodities, and to make regulations and bye-laws for the good government of the market. The act also prohibited the selling of any goods of the same nature as those sold in the market within 100 yards of its area under a penalty of 40*s*. The market is now used for the sale of hay and straw only, though the act gave power to sell all the commodities usually sold in markets, such as hay, straw, corn, grain, flour, malt, hops, &c.; meat, fish, poultry, eggs, &c.; fruit, vegetables, flowers, and plants. The market-days are Tuesdays, Thursdays, and Saturdays, and the market hours are from 7 a.m. to 3 p.m. from Lady-day to Michaelmas, and from 8 a.m. to 3 p.m. from Michaelmas to Lady-day.

A Hide and Skin Market is held at Weston Street, Bermondsey, daily, except Mondays, from 6 a.m. till 6 p.m. It is a private market belonging to the London Leather Warehouse Company, Limited, but open to the public for business between the hours stated. The company appoint a superintendent and gatekeeper, and standing-places, &c., are let to persons in the trade. A great part of the skins and hides sold come from the Deptford Market.

There are also the London Leather Exchange, Weston Street, Bermondsey; Exchange and Hop Warehouse, Southwark Street; London Egg Market, Southwark Street; and the Home and Foreign Produce Exchange, Hibernia Chambers.

Besides these, there are in London a large number of unauthorized street markets. These are practically confined to poor and crowded neighbourhoods, and are largely the means by which the surplus produce remaining unsold in the authorized markets are distributed amongst the poorer classes. Costermongers are keenly alive to ascertaining when produce is at exceptionally low

prices, and are always ready to purchase and distribute an almost unlimited quantity when that is the case. By this means the humbler consumer is frequently able to purchase food at a lower price than it has been quoted wholesale at the authorized market, as the costermonger is enabled to re-sell his goods at very low profits, his expenses being small.

The facts and conditions affecting each one of the informal markets now held in the County of London have been investigated by the London County Council, and a very able return was published. It was found that, in addition to isolated stalls scattered throughout the streets in many parts of London, there are in 112 cases such a persistent and continuous congregation of stalls as to probably bring them within the description "street markets". Of these there are:

North of the Thames, ...	... 76
South of the Thames, ...	... 36

Many of these street markets have been in existence beyond living memory, while others have been established at a comparatively recent date. The street markets are in nearly every case placed in the midst of or adjacent to working-class districts. The dimensions of the markets fluctuate from time to time considerably, varying with the seasons, and with the nature, quantity, and cheapness of the commodities that are sold at the stalls. The majority of these markets are continuous, that is to say, they are held during the whole week, although Saturday is the day upon which by far the greatest amount of trade is done: twenty-one of them are held upon Saturdays only, and two on Fridays and Saturdays only. In five cases, viz. those in Wentworth Street, Brick Lane, and Bethnal Green Road, on the north side of the

Thames, and in London Road and East Street, Newington, on the south side, the market is also held on Sunday morning, when a considerable amount of business is done. One street market, that in Sclater Street, Bethnal Green, is held only on a Sunday. In thirteen cases these markets are of sufficient importance and do a sufficiently large and general trade to be regarded as retail markets in the ordinary acceptation of the term, with the important exception that they have no market area or market buildings, but are conducted entirely in the public streets. Each of these thirteen markets supplies a very large district, purchasers often coming to them from a considerable distance. They are those situate as follows:—

King Street, Hammersmith.
Berwick Street, St. James's.
Leather Lane, Holborn.
Chapel Street, Clerkenwell.
Hoxton Street, Shoreditch.
Whitecross Street, St. Luke's.
Wentworth Street, Whitechapel.
Watney Street, St. George's.
Brick Lane, Bethnal Green.
Chrisp Street, Poplar.
Lambeth Marsh, Lambeth.
East Street, Newington.
Southwark Park Road, Bermondsey.

There are several other large street markets where considerable trade is done, but these are more local in their character, and are hardly to be regarded as market centres.

It was ascertained that the total number of stalls in 1893 in the 112 markets was 5292. Of these 790 belonged to shopkeepers, and were placed either opposite the shop or in its immediate neighbourhood, and the remaining number, 4502, belong to coster-

mongers. With regard to the nature of the commodities sold in these markets, it was found that, out of the total number of stalls, 3471 were devoted to the sale of perishable goods and 1821 to non-perishable.

This is not a creditable story. To think that London has only three classes of markets—one class for wholesale produce administered by the Corporation of London under obsolete charters and acts, loaded with an enormous debt which is not being paid off, and the surplus revenue (derived from the taxation of a very considerable area) applied to the non-municipal purposes of the City Corporation instead of being applied to the development of the market buildings and interests; the second class, belonging to private owners or to purely local authorities; and the third class, established in the open streets, under no control but the general police regulations, with no covered-stall sites, no sanitary conveniences, no market regulations to prevent unwholesome food or bad wares of any kind being sold, causing impediments of the most serious kinds to street traffic, and exercising evils in many directions. There are few questions more worthy of proper consideration and practical attention at the present time than this, and it is only privilege of a most indefensible character which prevents reform. It is not easy to speak moderately of this remarkable state of things. In the midst of the most elaborate schemes of local reform, such an essential as the complete reform of the market system is scarcely ever referred to, and the City markets may go on getting further into debt, the private markets may go on returning income to their owners with no regard to the obvious requirements of the market sites and buildings, and the street markets may go on fulfilling their legitimate objects in a fashion that would have disgraced the middle ages. There are,

however, signs of discontent with the present state of things, and the recent disclosure of the fact that at Clapham Junction the apparent costermongers' stalls are the private property of one owner who does a large and profitable trade destroys the justification of the nuisance. But reform is needed all round, not in isolated cases, and not in a direction to damage legitimate trade.

Chapter V.

The Growth in Population and Value.

It is not easy to trace the rapid growth of population in London because of the scarcity of census figures, a decennial census being of very slight value to rapidly-changing districts. The population of the present area of London in 1831 was 1,655,099, and in 1841 it was only 1,948,563. But in 1896 it had reached 4,433,018.

Of course the movement of this population is in the outer ring of London. Places that were rural in 1837 are now not detached from the continuous line of buildings that stretch all round the centre. Places that have even now fragments of their once rural character still remaining are losing them year by year, owing to the steady march of the builder.

A glance at the maps of London would help us to realize this growth. There are, for instance, three or four areas in the map of 1821 which are left more or less blank, and their gradual "filling-in" up to 1855 can be traced year by year. One of these areas, the triangle south of the river between Waterloo Road and Westminster Bridges Road, is shown in the 1821 map to contain only a few scattered

houses between Lambeth Marsh and the river, with no road but a narrow lane (called, I think, Narrow Lane) running nearly alongside the river. The 1829 map shows York Road, with several cross-roads joining it to Lambeth Marsh and the river, with rows of houses on either side of the new roads. The 1837 map shows more cross-roads and more houses. The 1851 map shows the formation of Belvedere Road parallel to the river and Lambeth Marsh, and of Waterloo Station and the South-Western line. The 1855 map shows Hungerford Bridge. Similar information may be obtained for almost every other district of the county, affording a most interesting method of studying London.

A few figures will best illustrate the enormous growth of London. In 1870 the annual value of land which was not used for buildings was £118,836, while in 1894 it was £67,560. This reduction shows that land was being taken into use for other purposes, and the other purposes may be specified under the heads of buildings, railways, and other kinds of buildings. Now, buildings in 1870 were valued at £17,108,736, while in 1894 they were valued at no less than £30,913,022; railways which in 1870 were valued at £617,780, were valued in 1894 at £1,754,404; while other kinds of property, valued in 1870 at £391,568, were valued in 1894 at £1,317,116 (*Parl. Ret.* 204, 1895). It is impossible to mistake the significance of these figures. They show a growth which is probably unique in the world's history, for it is not a sudden rise from almost nothing to a great city, such as is sometimes found in America, but it is a gradual rise, during a comparatively short period of years, from a great city to the greatest the world has yet seen. It is not generally appreciated that each householder in London is a unit among something like six hundred thousand fellow-householders, and that his

rent or annual value is a portion of a total rent of forty millions. An appeal to figures in such cases as this is the only way to bring home the facts. When people in the beginning of the reign, as I have noted in the first chapter, were auguring ill from the growth of London, they were speaking of a comparatively small London. Now, when we talk of London, whether in matters of pleasure, business, politics, or whether in matters of her interest and welfare, we are dealing with a community whose wealth and importance commands such a vast annual expenditure upon rent alone as forty millions of money.

The population of the present county of London is of course not contained in the census returns earlier than 1861, but grouping the parishes together the following are the results:—

Year.	City of London.	County of London.	Administrative County of London.
1801.....	128,129	830,659	958,788
1811.....	120,343	1,018,403	1,138,746
1821.....	124,137	1,254,944	1,379,081
1831.....	122,491	1,532,608	1,655,099
1841.....	123,563	1,825,000	1,948,563
1851.....	127,819	2,235,455	2,363,274
1861.....	112,013	2,696,849	2,808,862
1871.....	74,844	3,192,143	3,266,987
1881.....	50,569	3,783,625	3,834,194
1891.....	37,636	4,194,482	4,232,118
1896.....	31,083	4,401,935	4,433,018

Examining these figures in detail it is found that the population of the central parts of London is decreasing, and that this decrease is taking place geographically from the city outwards on the west, south, and north. Thus, a line bounding the City, St. Luke, Holborn, St. Giles, Strand, St. James, St. Martin, and St. Margaret on the north of the Thames, and St. Olave and St. Saviour on the

south, would embrace all the sanitary districts with a decreasing population of over 2 per cent. Also, with the exception of Whitechapel on the east and St. George, Hanover Square, on the west, the districts immediately outside this line, viz.—Bethnal Green, Shoreditch, Clerkenwell, St. Marylebone, Chelsea, St. George-the-Martyr and Bermondsey —have a slightly decreasing or a stationary population; while the districts with rapidly increasing populations are the outlying districts particularly in the west, south-west, and south-east, Fulham, Hammersmith, Wandsworth, Battersea, Lambeth, Camberwell, Clapham, Tooting, Lewisham, and Plumstead, and on the north, Hampstead, Stoke Newington, and Hackney.

It is well known that the population of London is not for the most part a London-born population. It is derived from the country to a large extent, and at the last census only 65 per cent of the people were born in London. Of course everybody has heard of the London cockney, but everybody does not know that the peculiar features of his pronunciation, so frequently made fun of, are real dialect forms, just as much so as the far-famed dialects of Somersetshire, Yorkshire, or any other county. The London dialect is really that of Essex, and it is a remarkable fact that the east end of London, so little known to the west end, possesses traits of character, peculiar customs and manners, and idiosyncracies which stamp it at once as an independent part of London, and not the refuse ground where the poor do congregate. The east end of London, indeed, is a study well worth any one's attention, and its solid capacity for work and patience is not the least among the valuable assets which London possesses in her population.

Another element in the London population is that of foreigners. There are 95,000 foreigners in Lon-

don. The subject of alien immigration as it affects the population of London and other large cities has been attracting attention in Parliament for some time, and it is not impossible that it may be dealt with by legislation. It is, however, exceedingly difficult to say how far, if at all, the number of alien immigrants who settle in London is increasing. Of the 15,499 aliens who arrived in the port of London in 1895, only 141 were stated to be *en route* for America or other places. It would appear, however, that it is not customary to issue through emigration tickets *via* London. For the whole of the United Kingdom, the total number of passengers from European ports (see Parl. Report, *Emigration and Immigration*, 1895) was 522,449, while the number sailing to European ports was 493,946, leaving the balance of inward passengers to the United Kingdom as 28,503. Assuming the number of British passengers outward and inward to be equal, this figure would represent the number of aliens arriving from the Continent. On the other hand, the number of foreigners sailing to non-European ports from the United Kingdom was 83,984 while the number returning was 65,343, leaving a net balance of foreign emigrants, 18,641. The maximum number of aliens settling in the United Kingdom in 1895 cannot therefore exceed 9862, the difference between the number of aliens arriving (28,503) and embarking (18,641). The 28,503 aliens, however, arriving from the Continent include 9894 alien seamen who, though arriving in the United Kingdom as passengers, may be assumed to have shipped again as crews. If so, they will not have been reckoned as emigrants, and their number must be added to the emigrant total in order to get an apportionately fair balance. From this it would seem as if there was a reduction of 32 in the number of aliens making a permanent settlement in the

United Kingdom in 1895. This is in continuation of a decline in the alien immigration, at least since 1892; the number of immigrants settling in the United Kingdom being estimated on the same basis at 8430 in 1892 and 3636 in 1893, while in 1894 and 1895 it would appear as if more aliens left the country than those who arrived. It cannot, however, be stated how London itself has been affected by alien immigration and emigration in any year, and until there is account taken of the number of aliens embarking from London, and of those travelling by railway to other ports of emigration, the exact number of aliens who settle in London cannot even be guessed. It is well worth consideration whether the alien immigration statistics could not be so framed as to be of service to the governing authorities of London. This is particularly important from the fact that though in proportion to the whole of London foreign settlement may be a small element, it may, and probably will, be found to affect particular districts to a marked degree. (*London Statistics*, vol. vii. p. xv.)

We get some indication of this from a report by the Italian consul, Signor Silvestrelli, published at Rome in February, 1895, which is instructive as to the Italian colony in London. There are two great Italian centres, the oldest being in Holborn, and composed of organ-men, ice-vendors, ambulant merchants, plaster-bust sellers, models for artists, &c. The second centre, more recent, is in Soho, composed of cooks, valets, domestics, couriers, teachers, artists, tailors, watchmakers, restaurant and hotel keepers. The whole Italian colony numbers about 12,000 persons. One of the most profitable trades of the Italians is the importation of alimentary articles. The Italian hotels and restaurants employ Italian cooks, who are also liked in some English establishments and clubs.

Italian tailors are increasing in number. As new industries the retail fruit and vegetable trades are giving large profits to Italian vendors. On the other hand, the Italian shoe trade is on the decrease, while, again, the Italian artificial-flower makers are prospering more and more. Since the Italian Exhibition in London of 1888 the importation of gloves, straw hats, furniture, inlaid work, glasswork, pictures, sculpture, and other kinds of fine art has much increased. The scientific-instrument trade has decreased in the Italian community. But decorative work in theatres, hotels, and cafés done by Italians promises more important development. Mechanics from Turin are much employed in such foundries as those of Maxim-Nordenfeldt. The use of Italian pavement-makers is increasing. The Holborn colony is the black point, as it is mostly composed of Southern Italians, whose reputation is not good.

The total number of Italians enumerated in the report is 11,595, and the details are interesting, though it must be confessed that in some instances the information does not seem quite satisfactory. For instance, there are Italian organ-grinders living at Battersea. It appears probable that the Italian consul has not dealt with the whole of London, but only central London, the London that he knows, or learns from the so-called Post Office London Directory, which does not really cover London. The Italian settlers are:

Merchants, traders, professional artists, ...	20
Sculptors, ...	12
Engineers and architects, ...	5
Hydraulic engineers, ...	4
Lawyers, ...	8
Doctors, ...	3
Professors of dancing, language, music and singing,	43
Dentists, ...	3
Stockbrokers, ...	4
Photographers, ...	6
Journalists, ...	9

Music publishers, ... 5
Booksellers and newsagents, ... 3
Printers, ... 2
Makers of barometers and scientific instruments, ... 10
Importers and makers of musical instruments, ... 12
Hotel keepers, ... 25
Apartment and boarding-house keepers, ... 21
Ice merchants, ... 10
Wholesale dealers in butter, cheese, eggs, poultry, ... 13
Importers of general food and drugs, ... 48
Publicans and beerhouse keepers, ... 9
Wine importers and merchants, ... 25
Restaurants, ... 122
Confectioners, ... 117
Dealers in fruit and vegetables, ... 11
Bakers and pastrycooks, ... 9
Commission agents, ... 10
Despatch agents, ... 1
Tobacconists, ... 5
Exporters of charcoal and iron, ... 5
Importers of marble, ... 5
Furniture makers, ... 15
Engravers and gilders, ... 5
Makers of looking-glasses and picture frames, ... 18
Glass silverers, ... 2
Upholsterers, ... 4
Painters and decorators, ... 5
Importers of works and objects of art, ... 11
Dealers in glass and mosaics, ... 5
Jewellers and goldsmiths, ... 8
Importers and makers of artificial flowers, ... 7
Tailors, ... 16
Dressmakers, ... 11
Dealers in gloves, straw hats, ... 4
General dealers, ... 33
Hairdressers, ... 25
Shoemakers, ... 10
Importers of live animals and fish, ... 4
Laundresses and ironers, ... 9
Modellers and figure makers, ... 9
Employment agencies, ... 7
Translators, commissioners, guides, couriers, interpreters, 150
Residents whose addresses appear in the directory, ... 1012

Holborn Quarter.

Asphalters—Workmen, ... 180
Mosaic workers, ... 130
Organ makers, ... 60
Furniture makers, frame makers, barometer makers, &c., 250
Workmen in ice trade, ... 300

Boys in kitchen (kitchen assistants), ...	40
Organ grinders, ...	1000
Vendors of ice-cream, potatoes, chestnuts, ...	2000

SOHO AND WEST END.

Valets and domestics, ...	2500
Cooks and apprentices, ...	900
Kitchen assistants, ...	1200
Shop assistants, ...	100
Workers in gold and jewellery, ...	150
Tailors, hairdressers, shoemakers (workmen), ...	600
Makers of artificial flowers, cages, and mineral waters (workmen), ...	50
Various, ...	180

Whether London gains from the foreign colonies, apart from individual foreigners, is open to question, but it is pleasing to think that exiles from foreign lands love the home of their adoption. In the district of Soho a few years ago were many French exiles of fine soldier-like appearance who worked as barbers and at other trades, and who always struck one as men who have seen history in the making; while few things are more charmingly humorous than the occasional boast of a naturalized foreigner that he is a "John Pull". These, at all events, are not the men London could do without; while it would lose somewhat of its picturesqueness if the Chinamen with their costumes of many colours and fashions, the Japanese, the Hindus, and other well-to-do sojourners were to disappear from our streets. Some of us, too, would not like to lose the courteous negro omnibus conductor nor the picturesque black shop porters who now and again help us to realize that London is the capital of an empire which includes many different races of people.

Before leaving this part of our subject it will be interesting, I think, to give a few indications of the wealth of London. A visitor to London would naturally go to see the far-famed Lombard Street, the abode of bankers, and assuming that he would walk from thence westwards, let us see

what he would pass in the shape of wealth. Lombard Street consists of only 41 houses, which are valued at £116,946 per annum; from thence into Cheapside the pedestrian would pass 130 houses valued at £93,373; then into St. Paul's Churchyard with 61 houses worth £47,981; into Ludgate Hill with its 72 houses valued at £48,047; Fleet Street with 143 houses valued at £69,883; the Strand with 406 houses valued at £169,224. Proceeding from this point into Pall Mall we pass through this far-famed street with its 132 houses valued at £99,750 per annum, and into Piccadilly, which has 241 houses valued at an annual £165,924, and Bond Street, with its 234 houses valued at £124,751. Oxford Street has 600 houses, the annual value of which is £201,276, and Regent Street 321 houses valued at £154,865.

Many streets of the great capital city are thus of higher value than whole towns in other parts of the country—towns of such importance as Canterbury, whose valuation is £110,000; Northampton, £205,000; Yarmouth, £177,000; Gloucester, £157,000; Winchester, £92,000; Rochester, £104,000; Margate, £128,000; Ramsgate, £134,000; Bedford, £124,000; and so on.

A serious problem is presented by these facts. What is the future population of London to be? is it to consist of the business part of the community and the wealthy inhabitants? are the poorer industrial sections to be located outside London in the counties of Essex, Middlesex, Kent, and Surrey? The settlement of this problem has become pressing during the past ten years. Overcrowding of the poorer classes is a danger to health, and it may be met by either of two ways, by erecting large sanitary buildings for the housing of work-people, or by providing cheap and commodious means of travelling to the outer parts beyond London. As to which

is the proper method of settling the problem it may be difficult to provide an answer. Experience alone can answer, as force does not determine economic problems, but the line of least resistance seems to point to the sending of the industrial population farther out by providing them the means of transit. It need hardly be pointed out how materially this will affect the future history both of London and extra-London.

It would have been a pleasing thing to have concluded this chapter with an account of some of the peculiarities of the London people—its love of law and order; its fondness for crowds; its cries, at once so amusing and so distracting, "Westminster", "igher up", and the rest of them; its solid humour; its principal characters, from the distinguished statesmen, literary men, musicians, actors, whom one encounters in Bond Street or Pall Mall, to the men who daily, summer and winter, wet or fine, snow or ice, take their morning bath in the Serpentine; its children who play at traditional games as old as the nation itself, in squalid and dirty courts, and yet get ruddy cheeks and not unpleasing faces, and those who congregate round the organ-grinder and dance as never children danced elsewhere; its respectable Sunday class of church-goers, and the freer minds who use the parks, museums, and other places of amusement; its resistless never-ceasing energy whether for play or for work, commencing with the morning from before eight o'clock, when two millions of people pour into the centre, and scarcely ending at eleven o'clock in the evening, when a quarter of a million pour forth from the theatres, music-halls, and places of amusement, to find their way home through the cool streets when Londoners like London best—all this would have formed a pleasing record of London people. But there would also have been the less

pleasing features, the crime, the poverty, the dirt, misery, and hoplessness of many thousands. And I have no room and scarcely any heart for all this.

Chapter VI.

Street Architecture.

The early years of the Queen were marked by the gloom and incompetence in matters of art which characterized the Georgian period of history. There were the remains of the older buildings, but no new inspiration to add picturesque details to the bricks and mortar which took the place of green fields and trees.

All round London were noble examples of interesting houses—houses standing within a large area of garden and meadow space, generally possessing fine hammered-iron gateways, and frequently containing a picturesque cedar-tree or a mulberry-tree. North, east, south, and west was this the case. In Fulham and Hammersmith there were many examples of Jacobean architecture; in Wandsworth, and other places in the south, they are not all gone even now; while in the east, in Bow, Poplar, and Bromley, there were quite a large number of the old dwellings of wealthy London citizens or Middlesex residents. Anyone caring for examples of such interesting work should visit the manor-house at Poplar, Bromley Hall, or others of this nature.

In the centre of London there were also numerous buildings of interest. Northumberland House, the most westerly of the ancient Strand palaces, had not then been needlessly destroyed for the street improvement of Northumberland Avenue, the ancient inns of Southwark and of Holborn were still in their

picturesque if somewhat battered condition; the White Horse Cellar, Piccadilly, from which the old coaches started at least as early as 1750; Winchester House, Old Broad Street; Earl's Court House, the residence of Dr. John Hunter from 1764 to 1795; bits of the ancient villages of London at Hampstead, Hackney, Bromley, and elsewhere; squalid but picturesque remnants of old Westminster; Fairfax House at Putney, and the so-called Cromwell's House at Shepherd's Bush, were all in existence, though, alas! the drawings published by the London Topographical Society and the descriptive notes by the Society for the Preservation of Ancient Buildings are all that is left to remind the Londoner of these interesting relics of the past.

Of spots sanctified by memories that belong to the Queen's London almost as much as to their antiquarian value is surely the Charterhouse. There is no talk yet of destroying this piece of ancient London and of Thackeray's London. The great writer was, as is well known, educated there, and he has left us memories of the place in the heroes of his stories, for they were all Charterhouse boys. Charterhouse School has now migrated to Godalming, but the Merchant Taylors' School has taken its place, and it is to be hoped will help to keep intact the whole of this interesting site.

The great squares of London remain much the same as when they were built, though some have been destroyed. Leicester Square, once the home of many famous men, has become the home of music-hall amusement, and Russell Square is doomed to destruction. But nearly all the others retain their sombreness and their charm, including here and there, perhaps most notably in St. James's Square and Portman Square, the iron link-holders on the railing in front of the houses, which mark the time before gas was used for the lighting of the streets.

One cannot help being struck by the beauty of street architecture where, as in our oldest cities, Chester, Salisbury, Ipswich, and others, Elizabethan and Jacobean buildings are still extant. The houses of Staple Inn facing Holborn, opposite Gray's Inn Lane, are of this character, and they have been preserved by the public spirit of their owners, the Prudential Fire Insurance Company. But why were houses of this description destroyed so largely, and why was their architecture not copied? They were, at all events, works of art, and helped to make pleasing the surroundings of dwellers in towns. They have been replaced by the hideous monstrosities of Harley Street, Gower Street, and so on in the west of London, and by long rows of unshapen cottages or hovels in the poorer parts. The Georgian spirit of architecture was against art, and declared for so-called utilitarianism, as if utility could exist without the element of art.

London in the eighteenth century contained many specimens of this picturesque architecture, but they rapidly disappeared, and in searching for the cause (for it has never been properly ascertained), I think the most likely is to be found in the preamble to many of the local acts of Parliament. Examples occur in the acts of Clerkenwell and Aldgate, where the disadvantages of the gable houses are curiously set forth.

The preamble to an act of 11 George III., cap. 23, 1771, recites that certain streets in the parish of Aldgate, in the county of Middlesex, "are very ill paved, and the passage through the same greatly obstructed by posts, projections, and other nuisances, and annoyed by spouts, signs, and gutters", and then proceeds to enact "that all houses and buildings hereafter to be built or new fronted shall, for the effectual and absolute prevention of all man-

ner of projections, annoyances, and inconveniences thereby, rise perpendicularly from the foundation; and if any person shall at any time hereafter presume to build or new front any house otherwise than perpendicularly" the commissioners shall cause the same to be pulled down and removed. In this way were the projecting house fronts of picturesque London destroyed; they did not suit the new requirements, and so they had to give way. Necessarily, and not so unreasonably, the projecting shop-signs and house-marks, which belonged to an age when sign-reading was more generally understood than letters, were also condemned, and I will quote an act of 1834 as an example of the spirit with which these things were condemned. The act makes all signs, sign-irons, sign-posts, barbers' poles, dyers' poles, stalls, blocks, bulks, show-boards, butchers' hooks, spouts, water-pipes, and other projections in front of the houses in Bermondsey to be liable to removal at the demand of the local commissioners, and at the same time authorizes the impounding of cattle straying in the streets.

It seems remarkable that the only remedy for deficient rain-water drainage should be the destruction of the buildings and the introduction of a totally different style of street architecture. Street signs no doubt had to go, picturesque though they were, and yet it is noticeable that there is a revival of the practice occasionally to be met with, as, for instance, the "Gainsborough Head" which graces one of the business premises in South Molton Street, Oxford Street. But in the meantime a new method of using signs has been developed. Anyone who travels through the streets of London, or indeed any modern city, must be struck with the enormous extent of street advertisements. The sky signs, without one single element of artistic construction, lime-light and electric-light letterings, posters covering hoard-

ings sometimes for considerable distances, all combine to render as hideous as possible the modern street. And yet the modern street might be made so picturesque, nay, is so picturesque. Lord Beaconsfield once said that the Strand was the most picturesque street in Europe, and in a sense this is so. A ride on the top of an omnibus through any of the great routes traversing all parts of London reveals to those who have the feeling for the picturesque beauties in London streets which are wholly local in character. The variety of architecture, the change of scene from shops brilliantly fitted up and at night brilliantly lighted, to private houses bright with flowers, and very often bright with the lights of some festive gathering, then to patches of green which mark a square-garden, or the grounds of an old-fashioned house still preserved in the midst of newer surroundings, and finally the long vistas opened up by the great western roads at the time of early morning or sun setting, and by the eastern, northern, and southern roads at other times of the day or night, all combine to make up the peculiar charm of London scenery. The pity of it is that it is not appreciated by those who can utilize it to make London what it could easily be, the most beautiful city in the world.

One means of doing this is to preserve what little is left of historic interest, a house sanctified as the residence of a great man, or as the place where a great event has happened, or as a relic of a past condition of life, even a street name; all help to create an interest in London which it is of the utmost benefit to foster and keep alive. It makes people the happier to know when they tread on historic ground. Some years ago my old friend Mr. W. J. Thoms (through some assistance of my own) saved the name of Tothill Street to Westminster, a name full of the most ancient memories, a guerdon

to Westminster of a whole system of institutions belonging to the earliest times of Saxon England. And so it is with other street names. They take us back along the stream of time.

It is pleasing therefore to record that the London County Council has set an excellent example of public influence in the preservation of historic buildings by obtaining parliamentary sanction to spend money for the purpose. By this means it is to be hoped that what little still exists will be allowed to remain, and particularly that the economies of preservation may be carefully considered before destruction is decided upon.

Of course it will be asked by the stern utilitarian of the time what is to be gained by keeping up old buildings and ancient memories, which are not in accord with our present requirements and surroundings; of course it will be objected by those who desire to use the magnificent site of London for squeezing out the largest possible amount of annual rent, that the preservation of such buildings has no justification; of course there will be a thousand arguments in favour of destruction against the one or two voices raised for preservation. And yet on strict grounds of utilitarianism there is much to be said in favour of keeping these places. They are better for the moral well-being of the community than the hideous rows of ghastly cottage or villa residences which disgrace all but the immediately central portions of London.

What a tremendous meaning there is in the fact that when Queen Victoria first began her reign there were living in London two great Londoners—two of the greatest Londoners, Thackeray and Dickens! Thackeray was married in 1837, and then lived in Great Coram Street, close to the Foundling Hospital. Later on he had chambers at 10 Crown Office Row, Temple, and at 88

St. James's Street, both which houses have since been demolished. From 1847 to 1853 he lived at No. 13 (now 16) Young Street, Kensington, and wrote there *Vanity Fair*, *Esmond*, and *Pendennis*. From 1853 to 1861 he lived in Onslow Square, Brompton, and from 1861 until his death in 1863 he occupied a house in Palace Gardens. Who would not think pleasingly, if not tenderly, of a city which contains such memorials as these? They are not manufactured, nor are they even developed, by the aid of anything that a city, however great, can do. And yet it is memorials such as these that London most neglects. A few tablets here and there, put up by the liberality and public spirit of the Society of Arts, the purchase of one house hallowed by the memories of a great man, namely, Carlyle's house in Cheyne Walk, and Londoners think no more of these things.

I think of the London where Thackeray's masterpieces were written as a place glorified. And then, too, there is the London which is to be found in the pages of Charles Dickens. The late Mr. Sala gives us a picture of what London meant when Dickens was one of its denizens. He was encountered "in the oddest places and in the most inclement weather: in Ratcliff Highway, in Haverstock Hill, in Camberwell Green, in Gray's Inn Lane, in the Wandsworth Road, at Hammersmith Broadway, in Norton Folgate, and at Kensal New Town. A hansom whisked you by the Bell and Horses at Brompton, and there was Charles Dickens striding as with seven-leagued boots seemingly in the direction of North End, Fulham. The Metropolitan Railway disgorged you at Lisson Grove, and you met Charles Dickens plodding steadily towards the Yorkshire Stingo. He was to be met rapidly skirting the grim back wall of the prison in Coldbath Fields, or trudging along the Seven Sisters Road at Holloway, or bear-

ing under a steady press of sail through Highgate Archway or pursuing the even tenor of his way up the Vauxhall Bridge Road."

This is delightful word-picturing. Hansom cabs and metropolitan railways that did not exist at the beginning of the Queen's London have the sanctity of a great personality brought to them while London was yet the Queen's London.

Furnival's Inn was the residence of Dickens in his bachelor days when he was a reporter for the *Morning Chronicle*. It is now pulled down. In 1837 he removed to 48 Doughty Street, where he wrote *Oliver Twist*, *Nicholas Nickleby*, and some sketches. In 1840 he went to 1 Devonshire Terrace in the Marylebone Road, which has recently been altered, and in 1851 to Tavistock House, Tavistock Square, where he wrote *Bleak House*, *Little Dorrit*, *A Tale of Two Cities*, and *Great Expectations*. At Devonshire Terrace he wrote *Master Humphrey's Clock*, *Martin Chuzzlewit*, *Dombey and Son*, and *David Copperfield*.

These two of the long roll of distinguished Londoners are known to the present generation, and it seemed worth while to illustrate the interest of London when it is viewed from the personal interest derived from such writers as these. The interest could be extended in many directions though the chances are disappearing all too rapidly.

In the central and more wealthy districts of London there is a vast improvement in street architecture. Any one acquainted with the rebuilding of Lord Cadogan's estate at Chelsea, and of the Grosvenor estate in St. George's will concede this. The shop property and private houses built within the last few years in Mount Street, Audley Street, and the neighbourhood are of the most interesting types, while in all the great centres, Oxford Street, Bond Street, the Strand, rebuilding is proceeding

at an astonishing pace. And fortunately rebuilding means, as a rule, improvement in style. There seems at least a hope that London may be made more worthy of her position than has hitherto been the case.

Chapter VII.

The Parks and Open Spaces.

The filling up of London with buildings has not been accomplished without regard to the essentials of health in one important particular. Open spaces, very aptly termed the lungs of the great city, have been extended, and are being extended, in all directions. Hyde Park, St. James's Park, and Regent's Park called forth, as we have already seen, the enthusiastic admiration of foreign visitors at the beginning of the Queen's reign, and they are still the subject of the same degree of admiration. To the royal parks, however, have now been added the municipal parks, and these have become of service to the people in a sense that was not contemplated a few years ago. Anyone who can remember the London Sunday in the summer say twenty years ago, and will compare it with that of to-day, will think that London has changed her old reputation of a sad and miserable method of spending Sunday for an approach to the continental method. The gaiety of Hyde Park on a July Sunday evening is indescribable. It is equal to anything to be seen in Paris for brightness of colour and attractiveness; it surpasses anything to be seen in Paris or elsewhere for a sense of real comfort and enjoyment. And in the other parks and open spaces there are the same elements, if differently expressed. Battersea Park particularly is a happy expression of a people's

holy day, while Wormwood Scrubs, Hampstead Heath, Victoria Park, and Greenwich Park complete the circle of open-air enjoyment all round London, with numerous additional examples intervening in different localities. London indeed is beginning to assume a more domestic appearance, a more residential look, than it did in the sixties, and this is chiefly due to the increase of the parks and their superior administration.

But the parks are for health as well as enjoyment. How they serve for health purposes can be tested by comparing their location with the requirements of the different districts. In the whole county there is the following acreage of parks and open spaces:—

Authority maintaining open space.	Acreage.
H.M. Government	1875¾
London County Council—	
Small open spaces	40½
Other open spaces	3403¼
City Corporation	4
Vestries and District Boards	212¼
Burial Boards	7¼
Conservators of Commons	460¾
Metropolitan Public Gardens Association	6
Private persons and companies	41¼
	6051
Disused burial-grounds not open to the public	91
Total for County of London ...	6142

The total area of open spaces in London is therefore 6142 acres, being one acre for every 717 inhabitants. This general proportion, however, does not give the real significance of the open spaces in London. For this purpose, the distribution of open spaces amongst the population must be considered. Material for such a comparison is given

in a table printed in the Appendix, which shows for each sanitary district arranged in geographical groups the total area of open spaces (including burial-grounds not open to the public), and the total area of the sanitary district. For this purpose it might be proper to include the acreage of foreshore and tidal water of the upper portions of the river, which are used for recreation and pleasure, but the same conditions do not apply to the river below London Bridge, which is used almost entirely for commercial purposes. It has therefore been considered better to omit the acreage of foreshore and tidal water altogether.

It will be seen from this Appendix how differently the various sanitary districts are situated in relation to open spaces; it is particularly instructive to consider the relation between various groups of districts. Placing the groups in the order of the death-rates, the relation of the groups with regard to statistics of population per acre and of overcrowding may be compared.

Group.	Death-rate.	Population per acre of open space.	Population per acre of whole district.	Over-crowding, proportion of total population.
Central London (East)....	25·7	9,149	188	38·49
Central London (West)...	25·0	943	123	29·76
Central London (South)...	24·9	3,911	131	25·09
East London.....	24·3	2,326	115	25·78
Average County.....	*20·8*	*717*	*59*	*19·57*
South London.....	19·9	1,648	65	13·66
West London.....	19·3	710	73	16·07
North London.....	19·2	625	77	20·06
South-East London.....	17·7	401	20	8·62
South-West London.....	17·5	224	31	9·80

A valuable contribution to the subject of the provision of open spaces is made by Sir Robert Hunter in his paper on the movements for the

inclosure and preservation of open lands, read before the Royal Statistical Society. He gives the cost and the area, as well as the date of acquisition, of open spaces in Greater London. He sets out separately those situated for the most part in the County of London. The following is a summary:—

COUNTY OF LONDON.

	N.E. District.		S.W. District.	
	Acreage.	Price.	Acreage.	Price.
	A. R.	£	A. R.	£
Commons.....	496 2	165,000	677 –	42,776
Parks and Gardens.	502 –	394,459	338 –	142,507
	998 2	559,459	1,015 –	185,283

	S.E. District.		N.W. District.		Totals.	
	Acreage.	Price.	Acreage.	Price.	Acreage.	Price.
	A. R.	£	A. R.	£	A. R.	£
Commons	498 3	16,500	490 –	45,505	2,162 1	269,781
Parks and Gardens	432 3	332,580	381 1	443,650	1,654 –	1,313,196
	931 2	349,080	871 1	489,155	3,816 1	1,582,977
Royal Parks	—	—	—	—	1,249 –	
					5,065 1	

GREATER LONDON.

	County of London.		Outer London.		Greater London.	
	Acreage.	Price.	Acreage.	Price.	Acreage.	Price.
	A. R.	£	A. R.	£	A. R.	£
Commons ...	2,162 1	269,781	4,296 3	43,600	6,459 –	313,381
Epping Forest	—	—	5,531 –	189,012	5,531 –	189,012
Parks and gardens	1,654 –	1,313,196	466 –	87,600	2,120 –	1,400,796
	3,816 1	1,582,977	10,293 3	320,212	14,110 –	1,903,189
Royal Parks	1,249 –		3,639 –		4,888 –	
	5,065 1		13,932 3		18,998 –	

It will be seen that the total for the County of London differs from that shown in the Appendix, and this is because the latter includes the area of the portions of open spaces the greater parts of which are situated without the county.

Allusion was made in the first chapter to the question of the burial-grounds of London, and the serious effect of their continuous use. They are now made to serve the purposes of health by keeping them as recreation grounds, and it will be seen that they are included in the above calculations.

The burial-grounds which exist in the County and City of London are 362 in number. Of these 41 are church-yards and cemeteries still in use, a few being burial-grounds in which interments only occasionally take place, either in graves already in existence, or under the regulation of the Home Secretary. The other 321 are disused burial-grounds, most of which were closed by order in council between the years 1853 and 1858, and 90 of which are now public recreation grounds. While many of the graveyards are smaller than they once were, there existed within a reasonable period between 100 and 150 which have been entirely built over or appropriated as sites for railways and new roads.

In 1884 an act known as the Disused Burial-Grounds Act, 47 and 48 Vict., was passed to prevent the erection of buildings on burial-grounds. This was materially extended by clauses in the Open Spaces Act of 1887, and by a "burial-ground" is now meant any land set aside for interments, whether closed by order in council or not. The London County Council has special authority to enforce this act within the county area, powers to carry it out having been conferred upon the late Metropolitan Board of Works under its Various Powers Act of 1885. In the County of London the only encroachment which is permissible on a dis-

used burial-ground is the enlargement of an existing place of worship, although in the City the Commissioners of Sewers have the right, under certain circumstances, to appropriate portions of them for the widening of roads. But nevertheless encroachments on places of interment are frequent, mortuaries, schools, outhouses, stables, &c., being often erected in them; and as many of these grounds are, to a casual observer, unrecognizable as graveyards, being used as cooperages, builders' yards, asphalted play-grounds, &c., the law is easily evaded.

With a view to recording the actual site of all the existing burial-grounds in London, a valuable return was published by the London County Council and prepared by Mrs. Basil Holmes, from which I quote the following passage:—

"Upon the question of the general condition of the London burial-grounds, those which have been laid out for public recreation, and are being maintained by the London County Council, the vestries, district boards, or burial boards, are not only the most sanitary, the most useful, and the most pleasing, but are also the least in danger of being misused or encroached upon. Many of them are kept up with great reverence and care, and are bright and attractive all the year round. Amongst the burial-grounds which are closed to the public, by far the best kept are those which belong to the Society of Friends, a fact which was recognized by G. A. Walker as long ago as 1847, and which is still most noticeable. Some of the parochial churchyards and some of the Jewish grounds are also well kept, while others are not as neat as they should be. Most of those grounds which were started about 100 years ago by private speculators, and a few of the parish and dissenting burial-grounds, are now being used as builders' yards, carters' yards, &c.; but the burial-grounds which are most untidy, insanitary, and neglected, where the tombstones are

broken and tumbling about, where the grass is never cut, and where unsavoury rubbish of all kinds is allowed to accumulate, are certain, not very many, graveyards adjoining Baptist and Congregational chapels in different parts of London. This is partly due to the fact that there is no central body which looks after these grounds, and no lists of them, or reliable information about them, are to be had at Memorial Hall or the Baptist Union. Many of the chapels themselves have often changed hands, first belonging to one community and then another, so that the buildings and the graveyards (which are often in the hands of a few trustees) have not been maintained with the same interest as those of the Society of Friends, who attend to all matters connected with their meeting-houses and burial-grounds at their 'six weeks meeting'."

Besides the burial-grounds there are, in every division of the county, churches and chapels which never had graveyards attached to them, but which have vaults underneath them. Some of these were very extensively used. From the returns ordered by Parliament between the years 1830 and 1855, it appears that the burial-grounds attached to the dissenting places of worship were not so generally overcrowded as some of the churchyards, or as all of the private grounds, in one of which the rate of interment was computed to be upwards of 2300 bodies per acre annually.

The oldest of the churchyard-gardens, and one of most beautiful, is that of St. George's-in-the-East, which, with the adjoining graveyard of Cable Street Chapel, was laid out in 1875. The newest is St. Mary's, Woolwich, opened to the public on the last day of May, 1895. That it would eventually be well to treat all the Metropolitan burial-grounds in this manner was prophesied by the late Sir Edwin Chadwick in 1843, even while they were still being used for interments. He wrote: "The only obser-

vation I at present submit upon the space of ground now occupied (as burial-grounds) is that it would serve hereafter advantageously to be kept open as public ground".

The work of the Metropolitan Public Gardens Association has been most valuable and effective in preserving London's open spaces. Of the 90 burial-grounds which are now public recreation-grounds there is hardly one in the laying out of which the Association has not assisted, while many have been secured and laid out solely through its efforts, and negotiations have been carried on and offers made in connection with a large number of those which are not yet open to the public. The passing of the Disused Burial-Grounds Act was also due in great measure to the Association, while most of the cases of infringement of that Act which have been brought to light, were traced by its officials.

The work of providing London with open spaces is still going on, and so long as there remain any of the old mansions with large garden grounds attached there will still be opportunities. Ravenscourt Park at Hammersmith is one of the most successful of the conservative actions in this direction. It is a pity that Fairfax House, Putney, was not treated in the same way. An old Jacobean house and grounds in St. Leonard's Street, Bromley, is the latest acquisition made by the County Council for this purpose, and as this is such a distinctively historical feature of the neighbourhood it is hoped that its chief characteristics will be preserved.

Chapter VIII.

The Street Improvements of London.

A map of modern London is not the same in some of its chief topographical features as that of fifty years ago. The streets and roads of a past age do not suit the requirements of a later age in a city like London, where development has been so extensive and so continuous. And so from time to time the streets and roads of London have been altered.

Few things are more interesting than to notice the topographical changes caused by different economical conditions. The Roman roads of Britain, remarkable for their splendid engineering, their directness of purpose, their magnificent construction, are still largely used as the main roads in country districts. But the places where changes have taken place reveal the most significant evidence of the Anglo-Saxon conquest of Britain. The Roman roads converging on to London get lost as they approach the great city. The Edgeware Road, so magnificently straight for so long a distance, stops suddenly short at Oxford Street. The eastern road through Stratford continues into London, and so do the northern and southern roads. But the road plan of modern London is not the road plan of Roman London. Cheapside, the centre of Saxon life, chops up, so to speak, all the Roman conception of things.

As with Roman London so with later London. The Great Fire in 1666 gave to Wren an opportunity for remodelling the ground-plan of the city, which, however, was never accomplished, owing to the desire of the citizens to keep to the old lines. I am not sure that the citizens of King Charles the Second's reign were not correct in their view, and

I am quite sure that the London of to-day is the more picturesque in consequence.

But changes have to be made. A Select Committee, appointed in February, 1838, to consider plans for the improvement of the Metropolis, expressed the opinion that the original construction of the City of London on a great navigable river, along the banks of which its habitations were gradually extended, has determined the direction in which its main streets have always run—viz. from east to west; and the circumstances which have led to the vast increase of its buildings on the western side, a great city of opulent consumers having been thereby established at a considerable distance from what may properly be called the Port of London, whence is derived a large proportion of their consumable supplies, have contributed to maintain these as the main channels of communication. The Committee called attention in its report to the fact that there were districts in London through which no great thoroughfares passed, and which were wholly occupied by a dense population composed of the lowest class of labourers, who, being entirely secluded from the observation and influence of better-educated neighbours, exhibited a state of moral degradation deeply to be deplored. It was suggested that this lamentable state of affairs would be remedied whenever the great streams of public intercourse could be made to pass through the districts in question. It was also contended that the moral condition of these poorer occupants would necessarily be improved by communication with a more respectable inhabitancy, and that the introduction at the same time of improved habits and a freer circulation of air would tend materially to extirpate those prevalent diseases which not only ravaged the poorer inhabitants in question, but were so dangerous to the adjacent localities.

Between the years 1831 and 1851 the necessity of street improvements in London was so fully recognized by Parliament that, during that time, some eleven or twelve select committees were appointed to take into consideration plans for the improvement of the Metropolis, and to advise as to the best means of carrying out improvements.

So important was the subject of street improvement considered, that the Metropolitan Board in the first year of its existence proceeded to give much attention to the question of opening new lines of communication, and from the year 1857, when application was made to Parliament and power obtained for the formation of two new streets, until the Board ceased to exist in 1889, there was not a time at which it had not in hand extensive works intended to provide improved means of access from one part of the town to another.

A very valuable report, prepared by Mr. Percy Edwards, who is clerk to the Improvements Committee of the London County Council, has been published by the Council, giving a complete history of London improvements since 1855. Mr. Edwards's work is so exhaustive that there is little else to be said upon this subject, but I shall take from him a few particulars of interest, in order to explain generally the changes that have taken place.

The most important improvement, perhaps, is the construction of the Thames Embankment north of the Thames from Blackfriars to Chelsea, and south of the Thames from Westminster Bridge to Vauxhall. Napoleon is reported to have said that if ever he reigned over England he would make two embankments, north and south, and so make London a grand city. Left to themselves Londoners have accomplished much of this, though not all, and they have avoided the inevitable straight lines which would have resulted from a French ideal.

The reaches of the river are far too beautiful, and let it be added too useful, to be straightened out so as to become parallel to the opposite side, and Chelsea Reach was saved from such possible vandalism only this year (1898).

The Embankment from Blackfriars to Westminster was authorized by the act of 1862. It provided, in accordance with the recommendation of the Royal Commissioners, for a solid embankment with a road 100 feet wide between Westminster Bridge and the east side of the Temple Gardens, and for an embankment with dock openings and a road 70 feet wide between the last-mentioned point and Blackfriars, it having been deemed necessary to preserve access to the Whitefriars Dock and to the works of the City of London Gas Company, which were then on the river bank. But this was amended by the Metropolitan District Railway Act, 1864, which enacted that the eastern end of the Embankment should be so constructed as to best suit the formation of the railway as well as the convenience of the gas-works and docks.

The total area of ground reclaimed from the river, and previously covered with offensive mud-banks, was 37¼ acres. Of this area the carriage-way and footway occupy 19 acres. A space of about 10 acres is covered by gardens and ornamental grounds devoted to the public use, and the remainder became the property of the Crown, of the Societies of the Inner and Middle Temple, and of other adjacent land-owners. In connection with the improvement a subway was constructed for gas and water pipes, &c. The net cost of the Embankment, and of the works connected with it, was £1,156,981.

The magnitude of the Victoria Embankment works may be gathered from the quantities of various materials employed in their execution.

which Mr. Edwards approximately states as follows:—

Granite	650,000 cubic feet.
Brickwork	80,000 cubic yards.
Concrete	140,000 cubic yards.
Timber (for coffer-dam, &c.) ...	500,000 cubic feet.
Caissons (for coffer-dam, &c.) ...	2,500 tons.
Earth filling	1,000,000 cubic yards.
Excavation	144,000 cubic yards.
York paving	125,000 superficial feet.
Broken Granite	50,000 superficial yards.

For some years after the opening of the new Embankment there was no direct approach to it from Charing Cross. This was felt to be a great inconvenience, as much traffic coming from the west and north-west to the City converged at Charing Cross, and needed direct access to the Embankment on its way eastward. So early as 1866, while the Embankment works were in progress, the Metropolitan Board had perceived the need, and had proposed to make a new street through the site of Northumberland House and grounds. The Duke of Northumberland of that day, however, set his face determinedly against any interference with his ancestral mansion, and his opposition received much support from members of both Houses of Parliament, and from those who looked with disfavour on a proposal to destroy the last of the palaces of the English nobles which three centuries ago stood on the south side of the Strand now occupied by the streets leading from it to the river. The Metropolitan Board was forced to yield to the resistance which then and for several years after was offered to every attempt to get power to take Northumberland House. Eventually the necessities of the case were so strongly pressed that further resistance was abandoned, and the Board having, in 1872, learned that the present Duke of Northumberland

was willing to sell his property, an agreement was in the year 1873 concluded and ratified by Parliament, under which the Board acquired his Grace's property upon payment of £500,000, the Board at the same time obtaining power to make the new street. The house was pulled down and the thoroughfare completed and opened in March, 1876, and was named Northumberland Avenue.

Northumberland House was the town house of the Dukes of Northumberland. It would appear that a house existed on this spot in the time of Henry VIII. of which little or nothing is known, but in the reign of James I. a mansion was erected by Henry Howard, Earl of Northampton, in 1605, and was then known as Northampton House, but subsequently passing into the hands of the Earl of Suffolk, its designation was changed to Suffolk House. In 1642 it passed by marriage into the possession of Algernon Percy, Earl of Northumberland, and its name was altered to Northumberland House, a designation which it retained during the remainder of its existence, being in possession of the Dukes of Northumberland to the last. The house as erected by the Earl of Northampton consisted of only three sides of a quadrangle, one towards the Strand, with a wing on either side, the fourth side, fronting the river, having been subsequently built by the Earl of Suffolk; but this was afterwards reconstructed by the Earl of Northumberland from the designs of Inigo Jones. The first building is said by Walpole to have had for its architects Bernard Jansen and Gerard Christmas, but later authorities state that the Earl of Northampton himself designed the building. The greater part of the Strand front was rebuilt about 1748–50 and was burnt down in 1780. Despite this, however, the central portion, over the gateway, was probably but little interfered with. It was at this time that the ball-room was erected,

forming a western wing projecting towards the river on the garden front, together with a corresponding wing on the eastern side. Altogether it was a great pity to have destroyed so characteristic a feature of this central part of London. It was also unnecessary, for the present Northumberland Avenue is so constructed as to lead to the hideous railway bridge of the South-Eastern Railway instead of to the Embankment clear of all obstructions. The house could have been preserved for public purposes, part of the grounds for open spaces, and the access to the Embankment could have been better arranged. But these things are not much attended to in London, and Somerset House alone remains to tell us of the ancient Strand.

The southern Embankment was completed in 1869. Its length is 5200 feet, and the width varies from a minimum of about 60 feet. The net cost of the improvement was £1,014,525.

The ground available for building after the formation of the Embankment, and consisting of about 8½ acres between Westminster and Lambeth Bridges, was sold to the Governors of St. Thomas's Hospital, who, having been compelled to give up their old hospital in St. Thomas Street, Southwark, to make room for the railway works near London Bridge, erected the extensive and imposing range of buildings which, overlooking the river opposite the Houses of the Lords and Commons, forms one of the most prominent architectural features in that part of London. Some small pieces of ground remaining were inclosed and laid out as gardens. It should be stated that the Embankment was so planned as to render unnecessary the closing of the entrances to the docks which then existed in the locality, such as those at the Lambeth Pottery, the new road being carried over the entrances in question.

The name "Victoria Embankment" having been given to the embankment and new road between Westminster and Blackfriars, it was thought the most appropriate designation for that on the other side of the river between Westminster and Lambeth would be the "Albert Embankment", which name was accordingly given to it.

A third part of the river embanked by the Metropolitan Board was that at Chelsea, between the Royal Military Hospital and Battersea Bridge. From Millbank to Chelsea Hospital the river was already embanked, the work having been done by the Commissioners of Her Majesty's Works and Public Buildings about the year 1854. It was deemed desirable that the thoroughfare along the river-side from Westminster should be extended to Battersea Bridge, and the formation of an embankment offered the opportunity, which was found so useful in the case of the Victoria Embankment, of constructing in connection with it a portion of the low-level intercepting sewer. An act was obtained for this purpose in 1868. The works were begun in July, 1871, and completed in May, 1874. The length of the Chelsea Embankment was rather more than three-quarters of a mile, and the road was 70 feet wide. The road thus made completed a thoroughfare by the river-side, extending from Blackfriars to Battersea Bridge, 4½ miles in length. The net cost of this portion of the work was £269,591.

At the commencement of the Queen's reign the Bridges were maintained by tolls. They are now free, and Hammersmith and Fulham bridges have been rebuilt, others having been thoroughly renovated. Lambeth is being rebuilt, and the Corporation of the City, out of surplus trust funds devoted to London Bridge, have built Tower Bridge. The approaches to all these bridges have been improved at great cost. But there are only fifteen bridges in

London, and the time is rapidly approaching when this subject must receive attention.

Passing now to the street improvements, the most important in the central area are Queen Victoria Street from the Mansion House to Blackfriars Bridge, and the magnificent Holborn Viaduct over Snow Hill. The former connected the Embankment with the City, thus forming a complete route from the Houses of Parliament to the Mansion House. In excavating through a locality so rich in historical associations, it was to be expected that some memorials of the past would be discovered. The most interesting example of this kind was met with at the eastern end of the street near the Mansion House, where, in the valley of the Walbrook, formerly a tributary of the Thames, was found, in excellent preservation, a large slab of Roman tesselated pavement attached probably to a villa situated on the banks of the stream. This relic was carefully removed, and presented by the Metropolitan Board to the City Corporation, who placed it in the Guildhall Museum. It is, however, to be regretted that the excavations were not properly watched for remains of the past inhabitants of London.

A very necessary improvement was that of the Tower Hill. A block of houses between Postern Row and George Street was removed, and the road levels throughout were readjusted. Sandy's Row, a continuation of Middlesex Street into Bishopsgate, was widened in 1889. Coming farther west, the removal of Middle Row, Holborn, in 1867, destroyed one of the most picturesque examples of sixteenth-century timber-work in London. The widening of Gray's Inn Road, from the Clerkenwell Road to Rosebery Avenue, was completed in 1892, and included a viaduct of fourteen arches over the ancient valley of the Fleet river. A small improvement by the widening of Elm Street, Gray's Inn

Road, was completed in 1888. The widening of Southampton Row, Holborn, is being proceeded with, and will form a continuation line of the projected new street from the Strand at Holywell Street to Holborn.

Evidence of the extension of the improvements westwards occurs first in the widening of Tottenham Court Road at Bozier's Court. In the Strand district several improvements in the approaches to the Victoria Embankment in the Savoy district were carried out in 1877, and the widening of the Strand in Holywell Street is now progressing. There was a wicked attempt to remove the church of St. Mary-le-Strand for this purpose, but fortunately the London County Council rejected the proposal. The houses to be removed are very old, but not interesting historically or architecturally, and the improvement will be a good one. One great effect, though perhaps not the most important, will be the beautifying of this particular portion of the Strand, for it must be evident that this thoroughfare will gain considerably by opening up to view the two churches at present partly shut in and obscured, and by the imposing new buildings which the improvement will undoubtedly cause to be erected on what will be the new northern frontage to the Strand. St. Mary's Church is a beautiful example of the Italian style, while St. Clement's Church is connected with many historical associations. "That old church," said Carlyle of it, "where Samuel Johnson worshipped in the era of Voltaire, is a very venerable place."

It is also proposed that the appearance of the Strand should be further improved by the planting of trees at the widened portion. By no means the least important feature of the scheme is that the improvement will have the effect of giving greater air space and of admitting light and air where very much needed. Every large street improvement must

confer a great amount of benefit upon the people in consequence of the air space which a wide thoroughfare always provides.

A great series of improvements from Piccadilly Circus eastwards have been effected. The Circus itself has been enlarged by absorbing Titchborne Street, and a plot of land has been utilized by the erection of the Shaftesbury Memorial Fountain. Shaftesbury Avenue, from Piccadilly to Bloomsbury, was completed in 1886; Charing Cross Road, from Charing Cross to Tottenham Court Road, was completed in 1887, and Coventry Street was widened in 1881. The approaches to Covent Garden were improved by the formation of a new street, now called Garrick Street, in 1861.

Passing on still farther westwards, we have the improvement at Stingo Lane, Marylebone, in 1872; the widening of Harrow Road at its junction with the Edgeware Road in 1877; and a series of improvements at Hyde Park Corner. The most important of these consisted in the formation of a curved road commencing in Piccadilly opposite Hamilton Place, and passing through the Green Park into Grosvenor Place, which it entered opposite Halkin Street; a second road from Piccadilly opposite the entrance to Hyde Park leading into the new road already described, and having a short branch into Grosvenor Place immediately opposite Grosvenor Crescent, and diverting Constitution Hill into the new road from Hamilton Place at the point where the two new roads intersect. In order to effect these alterations it was necessary to remove the Wellington Archway, which is placed at the new entrance to Constitution Hill. This was carried out in 1883. Park Lane had already been widened at its Piccadilly end in 1871; and Knightsbridge was widened during the rebuilding of the barracks in 1880.

Kensington High Street has been considerably altered by improvements, and the old church has been replaced by a rather handsome modern structure. High Street, Young Street, and King Street have all been widened, and the picturesque appearance of old Kensington has been materially altered. Hammersmith Road eastwards from the Broadway was widened in 1888, and the Convent of Nuns there was pulled down and re-erected. Small improvements at Wood Lane, Hammersmith, in 1897, and Church Street, Fulham, in 1891, were also carried out.

South of the river, Battersea Park Road is to be widened, and two bridges have been widened in the same district. South Lambeth Road, near Beaufoy's distillery, was widened in 1896, and Coldharbour Lane, Lambeth, in 1890. The widening of Walworth Road, between Hampton Street and Thomas's Place, was much needed, and it was completed in 1888, while the widening of Newington Butts, opposite St. Mary's Church, was effected in 1877. The opening up of a communication between New Kent Road and Rodney Road at Victory Place, Newington, was completed in 1887. The widening of High Street, Camberwell, and High Street, Peckham, was completed in 1882, and opened up one of the chief roads in the south. In the same year the Deptford Bridge approaches were improved, and Canterbury Road Bridge over the Grand Surrey Canal was constructed in 1890. A new street connecting Evelyn Street, Deptford, with Creek Road is nearly completed.

In Southwark many improvements have been carried out, the most important of which is the widening of Tooley Street from Bermondsey Street to Dean Street. This was finally completed in 1884, and in 1887 the western side of Bermondsey New Road from Rothsay Street to Grange Road, and the eastern side of Star Corner, from Grange Road to

Abbey Street, were set back. The widening of Jamaica Road between New Church Street and Princes Road was effected in 1880. In 1888 a new street was formed, commencing in Southwark Bridge Road, near its junction with Peter Street, continuing in a south-easterly direction, and extended by the widening of Mint Street to Great Dover Street.

Coming next to east London north of the Thames, a new street was constructed, commencing at High Street, Whitechapel, at its intersection with Leman Street and Commercial Street, and terminating at Backchurch Lane, in the Commercial Road. Great Eastern Street, from High Street, Shoreditch, to Old Street, by way of Willow Walk, was completed in 1876, and makes a very important line of communication. In 1877, High Street, Shoreditch, was widened, and in 1879 the east was connected with the west by the new road from High Street, Shoreditch, to Oxford Street. In the same year the Bethnal Green Road was widened, and a new road constructed from Sun Street to Worship Street. The approaches to Victoria Park were constructed in 1862, forming a road named Burdett Road after the Baroness Burdett-Coutts, who has done so much for East London. An important riverside improvement at Wapping was completed in 1879 by widening High Street and Lower East Smithfield, by setting back portions of both the northern and southern sides, commencing from the eastern side of the entrance of the Wapping Basin of the London Dock in the parish of St. John, Wapping, and terminating at Little Thames Street, in the parish of St. Botolph Without Aldgate, and in the precinct of St. Katharine, and by widening the thoroughfare, commencing in Lower East Smithfield at the eastern end of Little Thames Street, and terminating near the entrance to St. Katharine's Docks.

Going farther northwards, the old-world aspect of Hackney has been destroyed by the necessities of the times, Mare Street having been widened in 1879. In the "merry" Islington of old several improvements were necessary. Goswell Road, opposite the Angel, was widened in 1879, and Upper Street was widened in 1888 by setting back the eastern side of the road between Islington Green and Florence Street, and the western side, between Waterloo Terrace and Barnsbury Street.

In Kentish Town the Kentish Town Road and Great College Street were widened in 1883; in 1895 a similar improvement at Fosters Road was effected; while in 1886 a new street was formed in continuation of Clarence Road to Great College Street, at the junction with King's Road. Some of the glories of old Hampstead disappeared by the formation of a new street, 50 feet wide, from Heath Street to Greenhill Road, the widening of High Street between Heath Street and Norway Yard, and the construction of a foot-passage connecting High Street with the new street.

It will be understood from this survey of the alterations in London streets that considerable changes have been effected. The net cost of all the improvements has been £11,516,974, and the total length of the streets improved or constructed is about $15^{4}/_{5}$ miles, the average width of the new roads being about 60 feet.

The whole of this cost falls, either directly or indirectly, upon the ratepayers, and the many economical questions which this fact involves have been matters of public discussion for some years. This is not the place to enter into this vexed subject. But it is open to doubt whether the piecemeal improvement of a place like London is an economical proceeding. So few connected necessities have been considered. Streets in formation for

the first time are all constructed upon the straight-line principle, and the endless beauties of an ancient street, with its broken sky-line everywhere forming charming touches of town scenery, if one may so call it, give way to the new idea of direct communication. But direct communication should be from somewhere to somewhere, and should take all matters into consideration. Already we have noted how woefully incomplete our market system is in London. Street improvements should have caused the consideration of this important subject, and the new thoroughfares should have led to the natural retail market-places of which I have already spoken, and have included the construction of a covered market. All round the great railway centres natural market-places exist, and these could be utilized for the public good.

One great improvement has been properly attended to, namely, the formation of street subways. People have little idea of what is built underground in London. Thus few streets have been more extensively utilized either above or below ground than that opposite the Mansion House. Immediately below the surface are the subways for gas and water pipes; the house-drains and sewers are beneath these; at a still lower level is the railway, and below this again, the large low-level intercepting sewer. Between Lambeth Hill and New Earl Street the whole of the ground beneath the street is completely honeycombed with those several structures, which extend the entire width of the street, from a depth of 30 feet below, up to within 18 inches of the surface. Few people passing along the street are aware of the net-work of iron pillars and girders which lie only a few inches beneath their feet. At Chatham Place, Blackfriars, are four large structures crossing each other in various directions below the surface; at the lowest

depth, about 40 feet, is the low-level sewer, over which crosses the main Fleet sewer, formerly a tributary stream of the Thames; above this, the Metropolitan District Railway; and above this again, the subway with its gas, water, and other pipes. These are all closely packed below the surface, and to accommodate them all within so limited a space was a matter of no little difficulty.

Sir Alexander Binnie, the chief engineer of the County Council, in giving evidence before the Water Commission of this year (see *Minutes of Evidence*, p. 287) gave two good examples of the way in which streets are used underground. The first instance is the Bayswater Road, between Notting Hill Gate and Westbourne Terrace. It is occupied by the main middle-level sewer of the London County Council, 6 feet by 4 feet; two 30-inch diameter, and one 21-inch diameter mains of the West Middlesex Company; two 30-inch diameter and one 18-inch diameter mains of the Grand Junction Company; one 36-inch main of the East London Company; then there are the local sewers and the large gas mains of the Gas Light and Coke Company; there is also an hydraulic company's main, about 6 or 7 inches in diameter; and below the whole of that there are two tunnels, 10 feet 6 inches in diameter, of the Central London Railway. At Notting Hill Gate the whole of these lines are crossed at right angles by the Metropolitan Railway. Another instance is the Edgware Road. In a portion of the Edgware Road there are the West Middlesex Company's mains, 36 inches and 15 inches in diameter; the Grand Junction Company's main, 24 inches in diameter; the East London Company's main, 36 inches in diameter; and then there are local sewers, gas mains, and electric-lighting conduits.

In all the new streets formed by the Council trees have been planted. Treeless London is, it is to be hoped, a thing of the past. The single tree in Cheapside may be cherished for many years as a curiosity of the City, but outside the busiest centres streets might well be beautified by the planting of trees. The Marylebone Road is in this respect one of the most pleasant and picturesque streets in London, and though attempts have been made to destroy it, just as its extension beyond Portland Road has long ago been destroyed, there is every prospect now of better policy prevailing.

Under the new streets subways have been constructed, and in some instances provision has been made for lighting these thoroughfares by electricity instead of by gas. The object of a subway is to prevent the paving from being constantly broken up for the alteration or laying of pipes, wires, &c. The Metropolitan Board in 1868 obtained an act conferring certain powers with regard to the subways which existed at that time. In 1893 the London County Council (Subways) Act was passed. That statute enacted that, with regard to all streets in which subways belonging to the Council were at that time in existence, no company should have the power to break up, without the consent of the Council, the surface of such streets for the purpose of laying or renewing any pipe other than a communication or supply pipe. The Acts also gave the Council power to require any company to take up any pipes in the streets in which subways existed at the time the Acts were passed, and to relay such pipes in the subways at the expense of the Council. The principal subways are:

	Yards.
Garrick Street	100
Commercial Road East	380
Northumberland Avenue	310

	Yards.
Shaftesbury Avenue	900
Charing Cross Road	900
Southwark Street	1100
Queen Victoria Street	1200
Victoria Embankment	2230
Rosebery Avenue	800
Sandy's Row	170

And it is a pity that this system cannot be extended throughout London, to avoid the constant expense of taking up and re-laying roadways. Underground London is indeed a wonderful place. Some of the great shops in Oxford Street have enormous underground apartments fitted up with wares for sale. Underground conveniences are being built in all directions, and anyone who has not stood in a London main sewer does not yet know the whole of his London history.

But if intercommunication between all parts of London has been facilitated by the construction of great roads, the pressure of London traffic has developed to an even greater extent. In no city in the world has street traffic assumed such enormous proportions, and in no city in the world has it been so shamefully neglected. Until quite recently it was left absolutely to private enterprise. The plan of a municipal service of locomotion, undertaken as a matter of course in all the great towns of England, was denied to London, and even now the shareholders of tramway companies cannot understand that the public need must stand before private gain. The speeches at the companies' meetings betray an amount of ignorance which would be amusing if it were not so painful. The subject is of importance to London in considering future street improvements, and in considering the needs of locomotion apart from street improvement. In this aspect it has already engaged the serious attention of the City Corporation, which, at

a special meeting of the Court of Aldermen on the 24th June, 1895, considered a report brought up from the General Purposes Committee on petitions of the Great Eastern and Metropolitan Railway Companies relative to obstructions in Liverpool Street, and asking that steps might be taken to remedy the serious hindrance to business and the great danger to the pedestrian traffic of that street. The Committee stated they had given the whole subject earnest attention, realizing its great importance in relation to the remarkable increase of traffic in the City. It appeared that the vehicles entering Liverpool Street on four consecutive days in April varied from 11,263 to 16,674 daily, and that the daily number of passengers using Bishopsgate Street Station was 30,000; Broad Street Station, 75,000; and Liverpool Street Station, 100,000. The total number of omnibuses entering the City daily was 8955; of persons entering and leaving the City by way of London Bridge, 214,000; of vehicles entering the City, 25,826; and foot passengers, 1,100,636.

From a special report published by the London County Council it appears that the greatest pressure of public locomotive traffic, apart from private vehicles, is at the following places, where the number of vehicles (omnibus and tramway only) is:

Bank of England (omnibus)	...	...	...	774 per hour.
Charing Cross ,,	...	...	...	692 ,,
Piccadilly Circus ,,	...	...	...	643 ,,
Oxford Circus ,,	...	...	...	627 ,,
Elephant and Castle (omnibus and tramway)			...	597 ,,

Along Fleet Street 316 omnibuses pass per hour; at Ludgate Circus, 379 per hour; in the Strand it increases to 444 per hour; and in Piccadilly it reaches to 423 per hour; in Oxford Street there are 569 per hour; in Holborn, 414 per hour. The central bridges are used to the following extent:—

London, 431 per hour; Blackfriars, 172 per hour; Waterloo, 134; and Westminster, 170 per hour.

There are twelve different tramway systems in London, having 136½ miles of line open for traffic and conveying 225,263,079 passengers during the year 1894; and fourteen omnibus systems, having approximately 636 miles of traffic routes, and conveying 326,082,794 passengers during the same year. These enormous figures are sufficient to prove the public character of this important service and the need there is to establish it upon a system which shall have for its first object the improvement of the traffic and conveniences for travelling. The Thames is now little used for travelling, and yet it was once one of the chief highways of London, and could be made to serve the same useful purpose now if it were properly regulated.

But the needs of London are concerned not only with the inter-county traffic, but with the traffic extension beyond the county area. It is so obvious that London depends upon outer-London for many necessities, that no enquiry into the means of locomotion can be complete without taking this subject into account. The necessities of London in relation to outer-London may be summed up under the heads of residential places and food supply.

The first head is met to a large extent by the railway system, but the subject extends into the question now engaging the attention of the London County Council, namely, whether artisan dwellings should be built upon the valuable sites within the county, or should be built upon sites outside the county and connected by tramways which should be run as part of the cost of artisan dwellings. Upon this part of the subject much information is needed which is not yet to hand, because it by no means follows that even if locomotive and residential conveniences were supplied in places chosen

by the Council, the artisan class would follow the lead thus indicated to them, and it is rather a question for consideration whether the opposite policy of accepting the actual conditions of industrial residence and locomotion as the basis for future action should not be followed.

The second head, that of food supply, is a very important and, as yet, a very much neglected part of this subject. It is contained in the subject of light railways, which has resulted in recent legislation. This has special reference to the facilities such railways would afford for the cheaper and more expeditious and convenient despatch of the agricultural produce of the home counties to the metropolitan markets, and to the facilities they would give to consumers in London for visiting the counties and purchasing, on the spot, what they needed. The extra-London area is largely used at present for the cultivation of garden produce, fruit, flowers, and other things for the London markets, and there appears to be a probability that the establishment of light railways would stimulate the development of the existing and other agricultural industries throughout the home counties, to the mutual advantage of producer and consumer, if light railways were so constructed as to combine both goods and passenger traffic, and were allowed running powers during certain hours over the London lines which lead direct to market centres. The evidence collected and published by the Royal Commission on Agriculture, appears to support these views. Many producers expressed their opinion that they are still most unfairly handicapped in competition with the foreign producers for the supply of the home markets, by reason of the reduced preferential rates conceded by the railway companies to the latter. As one witness forcibly put it, the struggling fruit-grower in Kent has to

suffer the mortification of seeing foreign fruit carried by the railway past his farm at rates which would not be conceded to him, and of finding his produce, in consequence, undersold in the London market.

The railways of Britain all converge on London, and there is no place too remote to be, more or less, in direct communication with the capital. No less than eleven great railway systems have their termini in London, with magnificent stations and enormous goods yards. The great junctions at Clapham on the south, Finsbury on the north, and Willesden on the west are the largest in the world. In all there are 251 railway-stations and twenty-two railway companies which serve London, and yet it is curious to note that not one station is called London. Of the vast traffic carried on by these lines, and of the perfect net-work of lines which they have made, it is almost needless to speak, for they are known to every Londoner. The special features of the London railway system are the luxurious travelling to the north or to Paris and abroad; the daily runs to Brighton and other sea-side resorts, where London merchants have one of their homes; the state-travelling of the Queen or other members of the royal family or their guests, in which Paddington Station, where the train for Windsor starts, takes so prominent a part; the various excursions to the sea and other country places; the consignments of food, from the daily early morning milk in millions of gallons to the occasional tons of water-cress, at Waterloo Station, up from Hampshire, and live turtles for aldermanic banquets; the constant daily influx of business men and women in the morning, and their return in the evening;—all the curiosities of travelling, in fact, make the London railway-stations marvellous indications of London life—indications that, if compared with the

list of inns where the stage-coaches started from in 1837, will illustrate the almost startling progress of London during the Queen's reign.

Chapter IX.

Education.

Now that there is a chance of London possessing a teaching university, it may be hoped that there will be still further improvements in this very necessary part of London life than that shown during the past few years. It is not possible to give a complete idea of the educational system of a place like London in a single chapter, but a few salient facts are absolutely necessary, and these will be stated as briefly as possible.

For a long time past, indeed, I suppose one may say ever since the Royal Society was founded by King Charles II., London has been the home of research. The so-called learned societies which now flourish in London apply themselves to every branch of science, history, and art, and on the whole apply themselves well. The meetings of the Royal Society, which were attended by Sir Isaac Newton, Sir Christopher Wren, John Evelyn, and Samuel Pepys when Charles II. was king, are now attended by men whose names have illumined the most remarkable period of scientific research which the world has ever seen. Whether societies formed on the voluntary principle assist the good work in the more advanced subjects or in the humbler methods, they are all useful educational institutions, and the continuous meetings for lectures and discussions which take place from November

to June are a distinct feature of London life, and a feature which is becoming increasingly popular, and which might be made of far greater importance if only the societies would organize their work.

As the capital of the empire, London is the seat of the principal museums of the nation. The British Museum is known all over the world for its treasures in every department of knowledge, from mere books to anthropology. The South Kensington Museum for Art, the Geological Museum in Jermyn Street, the Natural History Museum at South Kensington, the National Gallery, the National Portrait Gallery, the Tate Gallery, Grosvenor Road, the Wallace Collection, Sir John Soane's Museum and the Hunterian Museum in Lincoln's Inn Fields, and the Guildhall Museum are the principal centres, but it is remarkable and regrettable how little these places are used for practical educational purposes. Schools do not make it a part of their duty to teach from the objects themselves; there are few classes held for demonstration on any of the subjects for which the museums contain ample material for teaching, nor can it be said that the museums authorities encourage the educational side of their work. Theoretical education by lectures and class-books is the only accepted method, and practical education from objects collected for the purpose is almost entirely neglected.

The system of university extension lectures has been carried on in London since 1876 with marked success, and is becoming more and more appreciated by those who cannot afford other means of obtaining the results of the best teaching. In 1897 upwards of fourteen thousand students attended courses of lectures at about seventy centres. With Sir John Lubbock as president, Professor James Stuart, M.P., as chairman of the Universities Joint Board, and Dr. Kimmins as secretary, an enormous

deal of successful work has been accomplished, and there is something pathetic in the manner in which hard-working men will turn in their evenings to learn something of the knowledge which is outside their ordinary course of life.

In the meantime the old-fashioned private school has fortunately disappeared. Many of these at the beginning of the Queen's reign were founded by people of little or no training as teachers, too often by those who had failed in other branches of life. It is little short of marvellous that the English people, and above all the Londoner, should have allowed this system to have gone on so long. The high schools for girls, together with the private schools conducted on the same principles by properly-qualified teachers, and the public schools for boys, have done much to waken people to the situation. But a great deal still remains to be done which a proper system of organization would accomplish. People in London are migratory to an enormous extent. They move from north to south, from south to east, and so on with astonishing rapidity, and if public and private schools would recognize this, and endeavour by common agreement to adopt a system of education by which children could pass from one school to another without absolutely breaking the system of education a great gain would be obtained. Even among the public schools there is no common ground, and this might be attained without sacrificing special features.

The public schools of London have done so much for the sharp, clever London boy that it seems a pity they should be leaving London. Charterhouse and King's College have gone, Christ's Hospital is going. And what is to fill their place? It is true that Merchant Taylors', St. Paul's, University College, Mercers', City of London, and other schools are enlarging their bounds, and that new

schools are coming into existence; but there is no justification for a London school, founded by London men for London boys, deserting the place of its foundation; and I think the policy will be found in the end unsatisfactory both to the schools and to London. Doctor Abbott and the late Professor Seeley, two of the best authorities on the subject, had the profoundest respect for the ability of London boys. That the schools should desert these boys just at this moment, when London education promises to become more thoroughly organized than ever, is not creditable, and it is to be hoped that the new university may eventually be able to propound a scheme of affiliation or organization by which all the great London schools will eventually become parts of a great educational system, the feeding-ground for the future university scholars.

Next to the public schools are the special schools, of which the London School of Economics is the most important new development, and the polytechnics and technical centres.

The London School of Economics and Political Science, of which the commercial, economic, and statistical classes receive considerable aid from the Technical Education Board of the London County Council, was founded in 1895 in order to provide instruction of a university type in subjects relating to economic science and commercial organization. The school, which is under the direction of Professor W. A. S. Hewins, has grown with remarkable rapidity, and now provides continuous courses of instruction for two or three years in various branches of economics, in statistics, in railway organization, in palæography, in local government, and other subjects. The Commercial Education Committee of the London Chamber of Commerce have recently incorporated the commercial curriculum of the school in the syllabus of their examination for the

senior commercial certificate, and all the higher commercial subjects required for the examinations of the Institute of Bankers are now taught at the school.

The polytechnics are the most important centres of technical instruction in London. In 1893 there were only 6 of these institutions at work. There are now 11, including the East London Technical College (People's Palace) and the Goldsmiths' Institute, New Cross, which are supported, the one chiefly by the Drapers' Company and the other entirely by the Goldsmiths' Company, except for fees and Government grants. The remaining nine institutions are largely dependent upon the Technical Education Board of the London County Council for their maintenance and equipment, the other chief source of support being the Central Governing Body of the City Parochial Charities. Last year the Technical Education Board contributed a sum of £28,129 to the polytechnics, while the funds from the Central Governing Body amounted to £29,650.

The work of a polytechnic is of an extremely varied character. Within the walls of a single institution theoretical and practical instruction is given in all branches of chemistry and physics from the elementary to the most advanced stages, the laboratories being equipped with apparatus suitable both for general work and for research work; biology, botany, physiology, zoology, and other branches of natural science are taught on practical lines; thorough courses of training are provided for mechanical and electrical engineers in laboratories and workshops of the newest type; on the art side not only is teaching given in the ordinary branches of drawing, painting, and modelling, but students are specially trained in the application of design to existing industries; instruction is provided in foreign languages, literature, and commercial

subjects, and at most polytechnics there is a special department for the teaching of various branches of domestic economy to girls and women. The two new polytechnics which were opened for full work in 1898 both devote considerable attention to the needs of the building trades. Both the Northampton Institute in Clerkenwell and the Northern Polytechnic in Holloway Road provide classes in bricklaying and brick-cutting, masonry, carpentry and joinery, painters' and decorators' work, and plumbing. Of the older polytechnics, those at Regent Street and the Borough are specially noteworthy for the success which has attended their trade classes; in both institutions it has always been regarded as of great importance that the workers should be induced to join theoretical classes in addition to the practical classes. At Battersea Polytechnic the trade classes in brickwork, masonry, and plasterers' work form an important feature of the work of the institute; while at the South-West London Polytechnic the classes in plumbing, in painters' and decorators' work, and in electrical engineering, have met with considerable success.

The greater part of the educational work done in polytechnics is evening work; but most of the polytechnics have now established day classes as well. At Regent Street and the Birkbeck Institution day classes in science, literature, and commercial subjects have long been successfully carried on. At Regent Street there are also large day schools for boys and girls, and a school of architecture for young men between sixteen and eighteen years of age. Day schools, mostly organized as schools of science on the lines laid down by the Science and Art Department, have been established at Battersea Polytechnic and the South-West London Polytechnic, both being "mixed" schools for the co-education of boys and girls, and during the

year 1898 similar schools for boys only have been opened at the Borough Polytechnic and the Woolwich Polytechnic, a very successful start having been made in both cases. A further step in the direction of developing the day work at polytechnics has been taken during the last two years by the inauguration of day colleges for young men and young women at the South-West London Polytechnic. Both of these colleges have met with marked success; the college for men numbering 94 students, and the college for women, which was only opened this session, already numbering 144 students. Day classes on Saturday mornings for teachers, similar in scope and character to those held at University, King's, and Bedford Colleges, have been conducted during the past session at Battersea Polytechnic and the South-West London Polytechnic.

Technical institutes for specialized industries have also developed considerably under the influence of the Technical Education Board of the London County Council. The Trades Training School in Great Titchfield Street, supported by several of the City Companies, is generally recognized as an excellent example of an institution devoted chiefly to a special form of trade instruction, viz. workshop classes for members of the building trades; while the Leather Trades School in Bethnal Green, supported by the City and Guilds of London Institute, forms a good example of a "monotechnic" institution where instruction is given in one particular craft.

The Bolt Court Technical School has, since the commencement of the present session, fallen entirely under the management of the Technical Education Board. Day classes, giving a complete course of instruction in photo-process work, have been recently opened at the school, and several students are now pursuing a thorough training in

the various branches of the craft. In addition to the ordinary day and evening classes, arrangements have been made for the delivery of eight special lectures on photo-process work, and on the use of bichromated gelatine.

The Hackney Technical Institute, in Cassland Road, was opened in 1897, in order to provide trade instruction for members of the building trades. The Herold's Institute at Bermondsey is carried on as a branch of the Borough Polytechnic, and is devoted entirely to specialized instruction in the leather trades. The Shoreditch Municipal Technical School was opened by the Vestry of Shoreditch in 1893, with a view of providing trade instruction for members of the furniture trade. The St. Bride Foundation Institute was opened in 1894 for the benefit of those engaged in various branches of the printing trade. The Westminster Technical Institute in Vincent Square is devoted mainly to the provision of trade instruction for members of the building trades. Classes are conducted in brickwork, masonry, painters' and decorators' work, and plumbing. It is one of the few centres in London where trade instruction is given in carriage-building.

In order to meet the requirements of artisans and craftsmen who were engaged in industries for which a knowledge of artistic handicraft is essential, the Technical Education Board has established special schools in which art is taught entirely in its relation to special crafts, and in which the fees are fixed at a sufficiently low figure to enable working-men to attend the classes. The first school of this nature was the Central School of Arts and Crafts, which was opened at 316 Regent Street in November, 1896. The instruction given in this school relates in a great measure to those branches of the building trades which are associated with artistic handicraft, the following subjects being taught—architectural

design, shaded drawing for architects, stone work for architects, decorative lead work for architects and plumbers, the mechanics of building, stained-glass work, and cabinet design. A very successful branch has also been established dealing with silversmiths' work, and with enamelling. The subjects taught in the silversmiths' classes include designing, making, engraving, chasing, metal carving, and modelling. Classes are also held in bookbinding, embroidery, heraldic drawing, and woodcuts in colour, besides modelling and general drawing.

The second school of this type is the Camberwell School of Arts and Crafts, which is conducted under the management of the Board in a new building erected for the Camberwell Vestry, through the liberality of Mr. Passmore Edwards, who gave £5000 towards the cost of erection of the building in memory of the late Lord Leighton.

When the Technical Education Board first dealt with the question of art teaching in London, it decided to utilize for the purpose of technical art instruction as many of the existing art schools as possible, and it recognized eleven of the principal schools of art as "technical art schools", on condition that they co-operated with the Board in adapting their teaching to the requirements of the industrial branches of art. It was arranged that each of these schools should receive a fixed maintenance grant of £100 a year in addition to the attendance grants which they might earn under the Board's regulations. The Board has also made equipment grants from time to time when needed. The principal function of these schools of art is to give a sound general training in the principles of drawing, painting, and designing, and so to train the hand and eye of the student that he or she may be able hereafter to specialize with success in some particular craft. Some of these schools, such as the West-

minster School of Art, are mainly schools of drawing and painting; others, such as the Camden School of Art, combine drawing and painting with a considerable amount of technical work, especially design in black and white.

The Technical Education Board during the past year (1897–8) decided to make a maintenance grant of £100 a year to the Royal Botanic Society's School of Practical Gardening in Regent's Park on condition that free places were given to a certain number of the Board's scholars not exceeding ten. The school was opened in September, 1897. The scheme of work which has been drawn up by the Royal Botanic Society combines thorough practical instruction in all the operations of gardening with theoretical instruction in botany and the nature of soils and manures. The course is arranged so as to extend over three years, although pupils are at liberty to take a shorter (two years') course, if desired. During the first year pupils are engaged in exercises upon the use of tools, and in practice in mowing, rolling, turf-cutting, digging, trenching, and potting; they are also instructed in the best methods of laying-out flower-gardens and kitchen-gardens, and are exercised in bedding-out, elementary budding and grafting, planting, and gathering and storing fruit. When the weather does not permit of out-door work, a course of instruction is provided in the society's hot-houses and greenhouses, where the pupils learn potting and propagating, and in the society's museum, where lectures on botany are given, illustrated by the numerous specimens that are in the Society's collection. During the second year instruction is given in the preparation of soils and manures, the choice and growth of shrubs and trees suitable for small or large gardens, the planting and growth of vegetables, rotation of crops, the selection of fruit-trees, wall-fruit growing, storing

and preparing fruit for market, advanced budding, grafting, and pruning. The in-door course comprises lessons in horticultural building, hot-water heating, advanced propagation, methods of exterminating insect pests, and in-door growing of fruit and vegetables. The third year's course treats of the special classes of plants, cross-breeding and hybridization, together with landscape-gardening and elementary meteorology. Applications for under-gardeners and head-gardeners are received every year by the secretary of the Society from members of the Royal Botanic Society, who are about 2000 in number, and it is stated by the authorities of the school that there will be little difficulty in finding situations for lads who have been through the course of instruction which the school provides. Three scholars have already been appointed under this scheme by the Technical Education Board of the County Council, and three more will shortly be appointed.

In connection with the subject of gardening, reference may be made to the joint action of the Parks and Open Spaces Committee of the London County Council and the Technical Education Board in providing botanic gardens in some of the London parks. As a first step in this direction, Victoria Park, Battersea Park, and Ravenscourt Park have been selected, and it is proposed that beds should be specially prepared for the cultivation in each park of plants belonging to twenty of the most important natural orders, and that arrangements should be made for competent assistants to be present at regular times to give information to students and teachers and to provide specimens for study whenever this can be done without detriment to the plants. A guide-book is to be prepared, giving full particulars of the exhibits in the special departments of each park, and also calling attention to the

more interesting trees and shrubs to be found in other parts of the parks.

Secondary education is the avenue which leads from the elementary schools to all higher instruction, whether of a technical, commercial, or of a university character, and it is in this branch of education that London is now chiefly deficient. In giving evidence before the Special Committee of the Council, appointed in 1890 to inquire into the best means of applying the beer and spirit duties to the purposes of technical education, Sir Henry Roscoe stated that, in his opinion, the gravest defect in the educational system of London was the paucity of secondary schools and the absence of co-ordination in their work. He considered that the Council could do most good by giving such assistance to some thirty foundation schools in London as would enable them to provide the requisite buildings, apparatus, and staff to teach scientific and technical subjects. The Technical Education Board has set itself to carry out the policy thus recommended. Equipment grants have been given to the schools to enable them to equip efficient laboratories, and maintenance grants have been made towards the provision of teachers in science. As a result of these grants all the public secondary schools for boys which are assisted by the Board and attended by its scholars are now possessed of well-equipped laboratories, except in one case where the erection of a laboratory has been postponed owing to the preparation of a larger scheme. Several girls' schools have also been furnished with laboratories and enabled to provide instruction in practical science and domestic economy. Day schools for boys have been opened during the past year at the Borough Polytechnic and Woolwich Polytechnic; so that there are now seven polytechnics at which schools of science for day

scholars have been established, four of these having arisen since the Board began its work. Owing to the excellent equipment to be found in the polytechnics, these schools offer special facilities for a practical course in experimental science and manual training. That these schools are appreciated is shown by the rapidity with which they have been filled. An addition to the number of secondary schools has been made this session by the conversion of Raine's School at St. George-in-the-East from an elementary school into a secondary school.

Class of Scholarship.	Date of Election.	Number of Candidates.			Scholarships awarded.		
		Boys.	Girls.	Total.	Boys.	Girls.	Total.
Junior County	Dec. 1893,	650	310	960	130	70	200
	July, 1894,	759	374	1,133	200	101	301
	Dec. 1894,	745	562	1,307	142	78	220
	July, 1895,	1,231	853	2,084	225	109	334
	Dec. 1895,	1,106	604	1,710	178	100	278
	July, 1896,	1,156	855	2,011	180	120	300
	Dec. 1896,	1,002	712	1,714	175	125	300
		6,649	4,270	10,919	1,230	703	1,933
Intermediate County	July, 1894,	200	148	348	35	15	50
	July, 1895,	334	231	565	45	25	70
	July, 1896,	519	353	872	45	25	70
		1,053	732	1,785	125	65	190
Senior County	Oct. 1894,	38	23	61	4	1	5
	Oct. 1895,	76	34	110	4	1	5
	Oct. 1896,	48	17	65	4	1	5
		162	74	236	12	3	15

It will be gathered from the foregoing that technical education in London is under the administration of the County Council, the details of which are dealt with by the Technical Education Board appointed by the Council. Thanks greatly to the energy and organization of Mr. Sidney Webb, the

first chairman of the Technical Education Board, to Dr. Garnett, the organizing secretary, and to the unflagging attention of every member of the Board, much has been done in a very few years. A noticeable feature of the scheme is the awarding of county scholarships. The table on p. 186 is a summary of the number of candidates and the number of county scholars elected up to Lady-day, 1897.

The following is a summary of scholarships which have been awarded for special subjects up to March, 1897:—

Class of Scholarship.	Scholarships awarded.
Domestic Economy	712
Domestic Economy Training	45
Art Scholarships and Exhibitions—	
Evening Art Exhibitions	244
Artisan Art Scholarships	56
Schools of Art Scholarships	57
Evening Exhibitions in Science and Technology....	165
Horticultural Scholarships	2

Special attention has been paid to developing and improving the instruction provided for apprentices and journeymen in the principal London industries. Since 1893, when the Board began its work, the number of workshop classes has been greatly increased, there being now within the County 20 well-equipped and efficient centres of practical instruction in various trades, in which 205 separate classes of this kind were held during the session 1896–7.

It is not possible to exaggerate the importance of this branch of educational work. The direct results are noticeable, the indirect results are perhaps as remarkable, for there is now infused into the London mind for the first time the need and desire for sound education, and this must grow with increasing power each year.

I will conclude this inadequate survey of London's education by a few figures showing the condition of the public elementary education which is administered in London by the London School Board. The report of the Committee of Council on Education gives the following statistics with reference to Board Schools and Voluntary Schools for the Administrative County of London, for the year ended September, 1895:—

Class of Schools.	Number of Schools.	Number of Scholars on the Registers.	Parliamentary grants.	Cost thrown on local rates.	Total cost (exclusive of capital expenditure).
			£	£	£
Board Schools.....	433	—	635,777	1,454,420	2,208,641
Other schools receiving aid from the Committee of Council on Education ...	497	—	—	—	—
Total.....	930	715,330	635,777	1,454,420	2,208,641
Total for previous year.....	*923*	*698,842*	*594,640*	*1,408,455*	*2,082,218*

These are large figures, but they ought to be larger if the real needs of London were adequately met. But progress here, as in other directions, is being made, and a few years will probably see all requirements being satisfied.

Chapter X.

London Local Government.

A short description of the chaos of London Local Government in 1837 was given in the first chapter. Growth has taken place since that date, but chaos still exists. London government is a disgrace to a

civilized city; and it is so simply because no party in the state will take the question up, as it should be taken up, and settle it upon properly defined principles instead of upon expediency. The act of 1888, which made the County of London, was an enormous boon to London, and despite matters of detail which might be improved, is a measure of which any government might be proud. But it has not been followed up. It dealt with only a part of the question. There are two other parts still to be dealt with, namely, the ancient City of London, which rejoices in the unenviable position of an unreformed corporation, and the local areas in the rest of the county. These local areas are marvellous productions. The ancient parishes with their civil powers, the districts formed by the Act of 1855, the poor-law areas, the Local Board of Health, all combine to produce a chaos which is not understood by any member of Her Majesty's government, and certainly not by the ordinary citizen. I cannot, I fear, do more than explain very shortly the various parts of this wonderfully cumbrous and expensive machinery.

The county area is made up of two distinct units. The first is the City of London within the ancient boundary of the City; the second is the County of London, which is made up of the groups of parishes formerly constituting the Metropolis, as defined by the Metropolis Management Act, 1855. The City area is a municipal area older than the parishes into which it is now divided; the County area is an administrative area made up of the several contiguous parishes of which it is formed.

The affairs of the county area are administered by the London County Council, the City of London Corporation, the Commissioners of Metropolitan Police (whose area extends beyond the county area), the School Board for London, the Metropolitan

Asylums Board (whose area does not extend to the whole county), the Justices in Quarter Sessions, the Home Office with reference to the Metropolitan Police Courts (whose areas do not agree with the county), and the Thames Conservancy (whose area extends from Cricklade to Yantlet Creek).

The areas of London for the several purposes are given in the table on p. 191.

For the purposes of the elections for Parliament and for the County Council the county is divided into 58 electoral areas, the boundaries of which do not as a rule conflict with parish or ward boundaries. Each electoral area may be divided into polling districts for the purpose of facilitating the voting. The Justices in Petty Sessions perform this duty for parliamentary elections except where the parliamentary borough in which the electoral area is situated is in more than one petty sessional division, in which case the County Council performs the duty. For County Council elections, however, the County Council divides all the electoral areas into polling districts.

The number of voters for parliamentary elections in 1897 was 574,091, for County Council elections 582,538, and for parochial elections (comprising guardian elections and vestry elections) 673,628. Besides these, there are 13,246 parliamentary county electors qualified in respect of property in the administrative County of London to vote for representatives of the ancient counties of Middlesex, Surrey, and Kent, and 712,907 School Board voters who are rated householders.

The county area is also divided into special districts for certain administrative purposes. There are 12 coroners' districts, 14 police court districts, and 17 petty sessional divisions. There are also county court districts whose areas, however, are understood to be undergoing reconsideration. Be-

Name of Area.	Acreage.	Inhabited houses, 1896.	Population, 1896.	Rateable value, 1896.
				£
Administrative County of London—				
City of London	671	4,572	31,108	4,481,860
County of London	74,771	548,547	4,401,910	31,342,240
	75,442	553,119	4,433,018	35,824,100
Administrative County of London—				
Registration County of London	74,672	549,668	4,411,710	35,672,280
Penge (part of registration County of Surrey)	770	3,451	21,308	151,820
	75,442	553,119	4,433,018	35,824,100
Administrative County of London, comprising portions of the ancient counties of—				
Middlesex	31,484	322,043	2,768,914	26,576,086
Surrey	23,898	174,562	1,303,071	7,390,078
Kent	20,060	56,514	361,033	1,857,936
	75,442	553,119	4,433,018	35,824,100
Poor-law area of London (area adopted for the administration of the Metropolitan Poor-law system)	74,672	549,668	4,411,710	35,672,280
London School Board district	75,442	553,119	4,433,018	35,824,100
Greater London—				
Metropolitan Police District—				
County of London	74,771	548,547	4,401,910	31,342,240
County of Middlesex	149,046	—	—	3,627,650
County of Surrey (part)	80,058	—	—	2,250,205
County of Kent (part)	42,516	—	—	728,649
County of Essex (part)	60,466	—	—	2,049,243
County of Hertfordshire (part)	35,893	—	—	274,956
	442,750	—	—	40,272,943
City Police District	671	4,572	31,108	4,481,860
	443,421	—	—	44,754,803
Central Criminal Court District	269,140	—	—	—

sides these there are 64 district surveyors' districts. There are also separate districts for the inspection of weights and measures (13 districts); of common lodging-houses (11 districts); of explosives, petroleum, and shop hours (5 districts); cow-houses, dairies, and slaughter-houses (6 districts); and contagious diseases (animals) (11 districts).

London is related to the other areas under the administration of the Metropolitan Police Commissioners as follows:—

Areas.	Acreage (net).	Population, 1891.	Population, 1896.	Rateable value, 1891.	Rateable value, 1896.
				£	£
City of London ...	664	37,705	31,108	4,084,230	4,481,860
County of London	67,492	4,194,413	4,401,910	28,920,382	31,342,240
County of Middlesex	143,430	560,012	—	3,259,672	3,627,650
County of Surrey (part of).....	63,421	193,064	—	1,386,145	1,545,632
County Borough of Croydon	8,769	102,695	—	636,482	704,573
County of Kent (part of).....	41,783	96,746	—	656,465	728,649
County of Essex (part of).....	51,792	208,776	—	879,855	1,092,596
County Borough of West Ham	4,423	204,903	—	775,180	956,647
County of Herts (part of)....	35,049	35,492	—	237,696	274,956
Totals	416,823	5,633,806	—	40,836,107	44,754,803

There are eight water companies and eight gas companies administering these services in London, and the areas of supply are different in every case from other divisions of the county. No water company supplies both north and south of the Thames, but this distinction does not apply to the gas companies, for the Gas Light and Coke Company supplies districts both north and south of the Thames. The areas of both water and gas companies extend beyond the county boundary, and

they do not in any way coincide with each other. The eight water companies pump 70,000 millions of gallons of water in the year, or an average of about 190 millions per day. More than half of this is drawn from the Thames, about one-fourth from the Lea, and the remaining fourth from springs and wells. The eight gas companies manufacture about 30 million cubic feet of gas in the year, for which over three million tons of coal are used.

The affairs of the local areas are administered by the following bodies—

I. *Poor-law administration*—

30 Boards of guardians.
6 Boards of managers of school districts.
2 Boards of managers of sick asylum districts.

II. *Municipal administration*—

29 Vestries administrative.
12 District boards.
1 Local board of health (Woolwich).
1 Board of paving commissioners (Ely-place).
14 Burial boards.
19 Boards of library commissioners.
13 Boards of baths and washhouses commissioners.
2 Boards of trustees of markets (Whitechapel and St. Saviour's, Southwark).

III. *Parish administration*—

44 Vestries non-administrative in the County.
110 Vestries non-administrative in the City. There is a vestry for each parish in the City; the ancient open vestry has been preserved in the majority of the parishes and the select vestry constituted in a few parishes only.
57 "Overseers of the poor" in the County.
112 "Overseers of the poor" in the City.
1 "Directors of the poor" (St. Pancras).
2 "Guardians of the poor" (Chelsea and Lewisham).

2 "Governors and guardians of the poor" (Clerkenwell, Newington).
3 "Overseers, governors, and directors of the poor" (Deptford St. Paul, Deptford St. Nicholas, Greenwich).
2 "Trustees of the poor" (Hackney, St. George-in-the-East).
3 "Governors and directors of the poor" (Bermondsey, St. Andrew and St. George, Horselydown).
4 "Trustees and overseers of the poor" (Poplar, Ratcliff, Whitechapel, Norton Folgate).
4 Treasurers of inns of court (Gray's Inn, Lincoln's Inn, Inner Temple, Middle Temple).
1 Dean and Chapter of the Close of the Collegiate Church of St. Peter, Westminster.

The powers and duties of the authorities engaged in poor-law and municipal administration are well defined, as they are fixed by a series of general acts of parliament. The authorities, other than overseers, engaged in parish administration have been constituted for the most part by local acts passed prior to the general Metropolis Management Act of 1855, and their powers and duties differ in many respects. The exact position held by the overseers too, varies considerably in the London parishes, their status and duties being defined in many, if not in all, of the parishes by local acts. Generally, however, it may be said that the non-administrative vestries in the County have no duties except what remain to them of the common-law duties of vestries and the selection of representatives on the district board; that the vestries in the City have no duties at all beyond what remains to them of the common-law duties of vestries; and that the overseers, directors, governors, and guardians of the poor, trustees, &c., are the authorities responsible for the levy and

collection of rates, the registration of electors, and the preparation of jury lists, though the collection of rates is in the hands of the administrative vestries in Bethnal Green, Islington, Kensington, Paddington, St. George Hanover Square, St. Luke, St. Margaret and St. John Westminster, and St. Marylebone; and so far as the vestry rates are concerned in Clerkenwell, St. James Westminster, and St. Martin-in-the-Fields also.

The number of local authorities has been diminished since 1894 owing to the transfer of the powers and duties of Library Commissioners, Baths Commissioners, and Burials Boards in certain parishes to Vestries by orders of the Local Government Board under the Local Government Act, 1894.

The local areas are not conterminous for all purposes, and the intricacies caused by this fact are stated in *London Statistics* (vol. iv. pp. 589–605); while maps showing the local areas appeared in *London Statistics* (vol. iv. p. 606, and vol. vi. p. 632). The boundaries of the wards into which parishes are divided for the purposes of vestry elections and guardian elections are, however, now conterminous. The Metropolis Management Acts provide for the division of parishes into wards for vestry elections, the maximum number being fixed at eight. The London County Council obtained additional powers in its General Powers Act, 1893, to enable it to rearrange wards in parishes already divided into wards, but here again provision is made that the number of wards must not exceed eight. In the Council's General Powers Act, 1895, however, this restriction of the number of wards in a parish to eight has been removed so far as a rearrangement of existing wards is concerned, although it remains in the case of a parish being divided for the first time. Under the Local Government Act, 1894, the Council had the administrative

duty cast upon it of dividing parishes and unions into wards for guardian elections, without restriction as regards number, and all these areas have now been divided accordingly, except the City of London Union.

The poor-law areas are 30 in number, and they are represented by elected guardians, the details being given on p. 197.

A few of these areas are united into sick asylum districts for the provision of infirmaries. The Central London Sick Asylum District consists of St. Giles and St. George, Strand Union, and Westminster Union, while the Poplar and Stepney Sick Asylum District consists of the Poplar and Stepney Unions.

The union of poor-law areas into school districts for the maintenance of pauper children is more general. The City of London and St. Saviour's Unions and the Temples form the Central London School District; the Poplar and Whitechapel Unions form the Forest-gate School District; Kensington and Chelsea form the Kensington and Chelsea School District; the Lewisham and Wandsworth and Clapham Unions form the North Surrey School District; Camberwell, with the Greenwich, St. Olave, Stepney, and Woolwich Unions form the South Metropolitan School District; and Paddington with the Fulham and St. George's Unions form the West London School District.

The municipal vestries and district boards are the local sanitary authorities of London. They were constituted by the act of 1855. The Local Government Act of 1894 extended the franchise and produced considerable changes in the constitution of the vestries by the abolition of the property qualification and of the *ex officio* chairmanship of the vicar. The *ex officio* members of vestries were, however, retained, and the constitution of the dis-

Poor-law Area.	Number of electoral areas.	Number of guardians elected.	Area.	Population, April, 1896.	Rateable value, 6th April, 1896.
Parishes—			Acres.		£
Bethnal Green ...	4	24	755	129,162	450,625
Camberwell	8	30	4,450	253,076	1,143,248
Chelsea	5	24	794	96,646	779,696
Hampstead	5	18	2,248	75,449	786,908
Islington	11	30	3,109	336,764	1,770,738
Kensington	8	24	2,188	170,465	2,071,225
Lambeth	8	30	3,941	295,033	1,671,172
Mile End Old Town	8	24	677	111,060	399,458
Paddington	6	24	1,256	124,506	1,332,028
St. George-in-the-East	2	18	244	47,506	196,076
St. Giles and St. George	2	18	244	38,237	426,443
St. Marylebone ...	8	24	1,506	141,188	1,601,865
St. Pancras	8	30	2,672	240,764	1,648,134
Shoreditch	8	24	648	122,358	691,429
Unions—					
Fulham	14	24	3,987	217,980	1,147,382
Greenwich	11	24	3,425	175,774	906,049
Hackney	13	30	3,937	246,529	1,263,155
Holborn	14	30	791	138,488	1,157,321
Lewisham	13	24	10,793	105,873	727,892
Poplar	11	24	2,333	169,267	739,484
St. George's	13	30	1,940	133,556	2,853,650
St. Olave's	4	24	1,506	137,585	843,909
St. Saviour's... ...	10	30	1,119	206,582	1,129,801
Stepney	6	18	465	58,305	303,445
Strand	8	24	399	24,811	1,035,663
Wandsworth and Clapham	16	30	11,454	352,379	2,108,499
Westminster... ...	5	18	216	35,098	963,014
Whitechapel... ...	8	25	358	77,757	429,400
Woolwich	16	25	6,500	116,494	565,624
City of London ...	81	94	659	31,563	4,455,740
Totals for area under Poor Law authorities	334	816	74,614	4,410,255	35,599,073

trict boards was practically left unaltered. The following table gives the existing representation and other information in respect of vestries and district boards:—

Local Sanitary Area.	Number of electoral areas.	Number of representatives.		Area.	Population, April, 1896.	Rateable value, 6th April, 1896.
		Ex officio members.	Elected representatives.			
Parishes—				Acres.		£
Battersea	4	3	120	2,169	165,115	868,611
Bermondsey	6	1	120	627	85,475	416,581
Bethnal Green... ...	4	3	57	755	129,162	450,625
Camberwell	8	4	120	4,450	253,076	1,143,248
Chelsea	5	3	60	794	96,646	779,696
Clerkenwell	5	6	72	380	66,202	393,910
Fulham	8	3	72	1,701	113,781	560,965
Hackney	8	3	120	3,299	213,044	1,054,504
Hammersmith	6	3	72	2,286	104,199	586,417
Hampstead	5	3	72	2,248	75,449	786,908
Islington	11	1	120	3,109	336,764	1,770,738
Kensington	8	3	120	2,188	170,465	2,071,225
Lambeth	8	1	120	3,941	295,033	1,671,172
Mile End Old Town ...	8	2	90	677	111,060	399,458
Newington	5	3	72	631	120,939	491,901
Paddington	6	3	72	1,256	124,506	1,332,028
Plumstead	8	1	96	3,388	59,252	200,127
Rotherhithe	1	3	24	754	40,379	216,469
St. George-in-the-East	2	3	36	244	47,506	196,076
St. George, Hanover Sq.	7	3	120	1,117	79,967	1,981,652
St. George-the-Martyr	3	4	48	284	60,278	286,302
St. James, Westminster	4	3	48	163	23,050	801,105
St. Luke	5	3	60	237	41,527	347,192
St. Margaret and St. John	6	6	96	813	53,234	868,031
St. Martin-in-the-Fields	3	3	36	286	13,077	569,315
St. Marylebone ...	8	7	120	1,506	141,188	1,601,865
St. Pancras	8	3	120	2,672	240,764	1,648,134
Shoreditch	8	3	120	648	122,358	691,429
Stoke Newington ...	5	3	60	638	33,485	208,651
Local Board—Woolwich	1	—	21	1,126	41,314	270,818
Districts—Greenwich ...	11	—	99	3,425	175,774	906,049
Holborn	5	—	49	168	31,273	411,246
Lee	7	—	39	7,006	38,588	283,044
Lewisham	9	—	48	6,543	104,521	691,347
Limehouse	6	—	39	465	58,305	303,445
Poplar	11	—	60	2,333	169,267	739,484
St. Giles	2	—	48	244	38,237	426,443
St. Olave's	2	—	28	125	11,731	210,859
St. Saviour's	2	—	39	204	25,365	351,598
Strand	6	—	49	166	23,782	628,257
Wandsworth	13	—	63	9,285	187,264	1,239,888
Whitechapel	8	—	58	358	77,757	429,400
Totals for area under vestries and district boards		90	3,103	74,709	4,400,159	31,286,213

The vestries and district boards are the local authorities for electric lighting, but only six of these bodies have at present taken up this duty. In all other cases the duty is performed by the private companies, of which there are twelve in the County of London. The local authorities have 70,000 lamps, and supply 1¼ millions of units in the year (1895), while the companies supply over one million lamps and nearly nine millions of units in the year.

The local unit of rating is the parish. Of these there are 114 in the City of London, and 77 in the County of London, including 4 so-called extra-parochial places in the City and 6 in the County which are technically parishes inasmuch as they levy a separate poor-rate. There is also the Tower of London, which holds a unique position; the Government make a contribution to the Whitechapel District Board in lieu of general and sewer rates on a basis of £4000 in respect of the Tower, but no poor-rate is raised, and the Tower is not inserted in the County of London Valuation List.

The difference between the several parishes is best shown by the statistics of the largest and smallest in area and in population, thus—

	Name of Parish.	Area in Acres.	Inhabited houses, 1896.	Population, 1896.
County of London—				
Largest parishes,	Lewisham, ...	5,773	14,417	83,213
	Islington, ...	3,109	38,369	336,764
Smallest parishes,	Old Artillery Ground,	5	139	2,143
	Rolls, ...	11	50	287
	Staple Inn, ...	1	6	10
City of London—				
Largest parishes,	St. Botolph Without Bishopsgate, ...	44·5	256	1,744
	St. Botolph Without Aldgate, ...	38·7	529	5,126
Smallest parishes,	St. John-the-Evangelist, ...	·8	1	17
	Barnard's Inn, ...	·6	2	5
	St. Mary, Mounthaw,	1·0	3	14

There is, however, an interesting difference in the constitution of the parish within the City and without the City. The municipal boundary of the City is the controlling element in the City area, the parishes being simply ecclesiastical divisions of that area, which have in course of years assumed some of the functions of civil local authorities. They are extremely minute in many cases, and do not perform any functions of great importance to the community, while their legal position causes considerable administrative inconveniences. They have no relationship to the municipal wards, and their only electoral importance is in relation to the Board of Guardians. Some particulars are given in *London Statistics*, vol. v. pp. 369–401, of the area, population, and expenditure of these units, which are instances of a minute subdivision, for purposes no longer of any moment, and which, though remaining as an element of cost and complexity, cannot apparently be utilized in the future for other purposes. The parish has become a curiosity of local government in London. Two examples may be given. The parish of St. Christopher le Stocks is now almost entirely occupied by the Bank of England. The church of this parish was pulled down in 1781, but the churchyard remained and became the "garden" of the Bank. But though church and parishioners have disappeared, the parish remains and has all the administrative powers of that institution. This, however, is not the only relic of old institutions. The unique district of Ely Place, Holborn, an extra parochial jurisdiction of the Bishops of Ely when they had an episcopal residence in London, and to which Shakespeare alludes in a well-known passage in *Richard III.*, still possesses its commissioners of paving, still appoints its watchman, the lineal successor of ancient "Charley", who cries the hours

four times a day, and whose presence prevents any ordinary policeman having jurisdiction within the "liberty". The chapel, dedicated to St. Etheldreda, is all that remains of the ancient episcopal palace, and this is now a Roman Catholic church, having been recovered by the ancient church a few years ago. This is as it should be, but the ancient jurisdiction is one of the many anomalous blots upon the government of London.

Outside the City the boundary of the County is formed by the ancient civil parishes included within the County area, and the ecclesiastical parishes carved out of the older parishes have no power in civil matters. Under 6 and 7 Vict., cap. xxxvii., the Ecclesiastical Commissioners have the power of constituting parts of ancient parishes into ecclesiastical districts or parishes. Like all English administrative work, this operation has been accomplished without regard to the possibilities of the case in directions other than that immediately in hand. It happens, for example, that the ecclesiastical parish is made a unit for statistics under the census, and it is easy to see how valuable these statistics would have been if the units were grouped conterminously within the area of the ancient parishes. For some purposes a small unit of statistics is absolutely necessary, and the ecclesiastical parish could easily have been constituted that unit if, at the time of its formation, all the facts of the case had been duly considered. The existing state of things is shown in the table on p. 202.

I will sum up this condition of things by attempting to explain the position of the much-governed Londoner. There is first his ecclesiastical parish, which probably administers a voluntary school and appropriates taxation for the purpose. There is next the overseers of his civil parish, who perform various minor duties and charge the parish rates

Ecclesiastical parishes or districts.			County of London.	City of London.
Conflicting with ancient parishes			61	2
Conflicting with County—				
Greater part inside	3			
Greater part outside	8			
	—		11	—
Conflicting with both County and City			—	2
Co-extensive with ancient parishes			12	16
Not conflicting with, but forming parts of, ancient parishes			452	2
Constituted by grouping more than one ancient parish (of which eighty-nine in all are grouped)			—	34
Total, ...			536	56
Reputed to be extra-parochial places for ecclesiastical purposes			9	6

therewith. Next, there are several other bodies, trustees of parochial charities, burial board, baths commissioners, library commissioners, who perform their specified duties and sometimes charge the parish rates. Then there is the civil vestry whose duties are very slight, but who nevertheless have also a charge upon the parish rates. Then there is the poor-law union, who look after the poor and charge the rates therefor; the district board who attend to sanitary and other matters and charge the rates therefor. There are other districts, too, for schools and asylums, which have administrative duties and impose charges upon the rates. And then there are the asylums board, the school board, the county council, which administer county services and charge the rates therewith. Beyond these again there are the police commissioners who control the police for a large area in which London is included, and for which again the Londoner is charged with rates. Eight water companies have the privilege of taxing water consumers without any representation

of the consumers, and eight gas companies have the same privilege. Altogether the Londoner must study hard and spend much time if he wishes to examine into the responsibilities of his governors.

It would have been advisable if I could have given some conception of the classification of duties devolving upon these various authorities, but the task would be too heavy for so small a volume. But a note of warning is necessary. Much is being said now about transfer of duties from central to local authorities. If this is done upon some recognized principle, so that political expediency does not command the whole matter, good results will follow. But the subject is not at present being dealt with in this manner. It is being talked of and not considered; it is being desired for political purposes, and not always in the interests of good local government.

Chapter XI.

Local Taxation.

The primary fact which governs the amount of local taxation is the expenditure of local government authorities. In London this expenditure is incurred by 4 county authorities, 16 district authorities, 17 union authorities, 34 special district authorities, and 331 parish authorities. The total expenditure incurred in London in 1895–96 by these several authorities was as follows:—

1. *County Authorities*—	£	£
London County Council	2,206,651	
School Board for London	2,337,156	
Metropolitan Asylums Board	451,292	
„ Police	1,485,197	
		6,480,296

	£	£
2. *District Authorities*—		
City of London Corporation	789,434	
City Commissioners of Sewers	263,330	
District Boards (12)	555,226	
Library Commissioners (2)	2,684	
		1,610,674
3. *Union Authorities*—		
Boards of Guardians (17)		1,318,275
4. *Special District Authorities*—		
Sick Asylum District Managers (2)	32,589	
School District Managers (6)	122,432	
Library Commissioners (1)	2,570	
Wards of the City of London (25)	6,931	
		164,522
5. *Parish Authorities*—		
Vestries (29) and 1 Local Board	1,938,641	
Boards of Guardians (14)	1,163,851	
Overseers or bodies acting as overseers (192)	200,149	
Library Commissioners (27)	59,135	
Baths Commissioners (29)	137,093	
Burial Boards (29)	55,523	
Market Trustees (1)	8,076	
Churchwardens (9)	9,899	
		3,572,367
Total expenditure which governs the amount of local taxation	—	13,146,134

This expenditure is for the following purposes:—

Purpose.	Local Authority incurring Expenditure.	Amount.	
		£	£
Maintenance of the poor in workhouses, &c.	Metropolitan Asylums Board	342,993	
	Boards of Guardians	1,549,332	
	Sick Asylum District Managers	27,050	
	School District Managers	90,287	
			2,009,662
Maintenance of the poor (out-door)	Boards of Guardians	—	261,069
Maintenance of lunatics	London County Council	59,469	
	City of London Corporation	2,464	
	Boards of Guardians	360,410	
			422,343

Purpose.	Local Authority incurring Expenditure.	Amount.	
		£	£
Education	London County Council.....	76,560	
	School Board for London.....	1,851,704	
	City of London Corporation..	63,426	
	Vestries	495	
			1,992,185
Roads, dust removal, bridges, embankments, &c.	London County Council.....	38,124	
	City of London Corporation..	26,635	
	City Commissioners of Sewers	94,562	
	Vestries and District Boards..	1,377,600	
			1,536,921
Sewerage and drainage	London County Council.....	185,065	
	City Commissioners of Sewers	17,252	
	Vestries and District Boards..	185,368	
			387,685
Public health	London County Council.....	20,696	
	City of London Corporation..	13,201	
	City Commissioners of Sewers	7,947	
	Vestries and District Boards..	80,310	
	Overseers.....	110	
			122,264
Lighting	City Commissioners of Sewers	21,906	
	Vestries and District Boards..	253,595	
	Overseers.....	189	
			275,690
Police and magistracy	London County Council.....	98,260	
	Metropolitan Police	1,413,767	
	City of London Corporation..	185,982	
			1,698,009
Fire Brigade.....	London County Council.....	—	153,827
Parks, gardens, and open spaces	London County Council.....	107,042	
	City of London Corporation..	10,032	
	Vestries and District Boards..	17,522	
	Overseers.....	605	
	Churchwardens	477	
			135,678

Purpose.	Local Authority incurring Expenditure.	Amount.	
		£	£
Other ordinary services	London County Council.....	82,412	
	Metropolitan Police	29,282	
	City of London Corporation..	146	
	City Commissioners of Sewers	8,331	
	Vestries and District Boards..	27,736	
	Boards of Guardians.....	41,453	
	Overseers.....	64,186	
			253,546
Loans for all services	—	—	2,815,018
Establishment for all services where not separately charged	—	—	660,591
Special services ...	London County Council.....	6,695	
	Metropolitan Police.....	23,789	
	City of London Corporation..	151,780	
	City Commissioners of Sewers	5,631	
	Vestries and District Boards..	25,979	
	Library Commissioners.....	50,815	
	Boards of Guardians.....	2,536	
	Wards of City of London.....	6,931	
	Overseers.....	4,625	
	Baths Commissioners.....	85,885	
	Burial Boards	40,517	
	Market Trustees.....	7,041	
	Churchwardens	9,422	
			421,646
			13,146,134

This total expenditure (£13,146,134) does not fall wholly upon taxation. A portion of it is met by certain receipts-in-aid, and a portion is defrayed out of revenue from municipal property. Taxation is therefore relieved by the amount of these two items of receipt. They amount to £1,311,744, and this being deducted, leaves the net expenditure to be met by taxation at £11,834,390.

The taxation to meet this expenditure is divided

into three classes. First, there is an amount appropriated to local taxation from imperial taxes, which amount is applied to local expenditure before such expenditure is sent down upon local taxation proper; secondly, there are certain indirect local taxes levied independently of what the local expenditure may be, and applied to such expenditure before it is sent down upon direct taxation; and thirdly, there is the final balance of expenditure left over after these operations, which is the measure of the direct taxation. The amount of this direct taxation is therefore, as a matter of fact, determined by the amount of expenditure thus left over. Of the three divisions of local taxation, the first, appropriations from imperial taxes, and the second, local indirect taxation, are fixed according to rules, independent of municipal expenditure, that is, upon rules sanctioned by Parliament and not determined by the local authorities; while the third division only, direct taxation, is governed by the amount of municipal expenditure, and is under the control of local authorities. The total taxation is a measure of the municipal expenditure, but direct taxation alone bears the pressure of increased or receives the benefit of decreased municipal expenditure.

In the year 1895–96 the local expenditure in London was met by each of the three classes of taxation as follows:—

	£	£
A. *Appropriations from Imperial taxes*—		
London County Council	526,161	
School Board for London	650,224	
Metropolitan Police	616,347	
		1,792,732
B. *Indirect local taxation*—		
County taxation:	£	
London County Council	76,219	
Metropolitan Police	28,815	
City of London Corporation	134,282	
		239,316

	£	£	£
District taxation:			
City Commissioners of Sewers	8,117		
District Boards	208		
		8,325	
Special district taxation:			
Market Trustees		1,703	
Parish taxation:			
Vestries and Local Board	1,793		
Overseers	9,551		
Burial Boards	37,578		
		48,922	
			298,266
c. *Direct local taxation*—			
County rating:			
London County Council	2,952,322		
School Board for London	1,631,612		
Metropolitan Asylums Board	422,982		
Metropolitan Police	625,072		
Local Government Board	1,174,680		
		6,806,668	
District rating:			
City of London Corporation	78,848		
City Commissioners of Sewers	252,877		
District Boards	337,996		
Library Commissioners	2,494		
		672,215	
Union rating:			
Boards of Guardians		451,503	
Special district rating:			
Sick Asylum District Managers	31,085		
School District Managers	120,965		
Library Commissioners	2,658		
Wards of the City	6,965		
		161,673	
Parish rating:			
Vestries and Local Board	1,060,645		
Boards of Guardians	371,706		
Overseers	225,556		
Library Commissioners	53,479		
Baths Commissioners	78,023		
Burial Boards	12,755		
Churchwardens	10,452		
		1,812,616	
			9,904,675
Total local taxation			£11,995,673

The appropriations from imperial taxes involve a very complicated machinery and very complicated

system of taxation which would be too technical and too long to describe in this volume.

I next come to the indirect local taxation. This consists of several items, of which the following are the distinguishing kinds:—

	£
1. Licenses, duties, &c., collected in the area of the county by the Inland Revenue Commissioners, and handed over to the London County Council	438,644
2. Tax upon fire insurance companies at £35 per million of insurance effected in the County of London, collected by and applied by the London County Council	29,635
3. Licenses for petroleum, explosives, cow-houses, slaughter-houses, locomotives, theatres, and sky-signs, fees in respect of dangerous structures and Building Act, collected by and applied by the London County Council	41,777
4. Licenses for explosives and sky-signs, collected and applied by the City Commissioners of Sewers (dangerous structures are not separately stated, and cannot therefore be given)	3
5. Licenses for petroleum and locomotives, collected and applied by the City of London Corporation	32
6. Fees payable for stamping weights and measures, collected and applied by the London County Council	4,807
7. The same, collected and applied by the City Commissioners of Sewers	747
8. Licenses for public carriages, collected and applied by the Metropolitan police	28,616
9. Fees payable for certificates to pedlars and chimney-sweeps, collected and applied by the Metropolitan police	199
10. Licenses for advertisement hoardings, collected and applied by vestries and district boards and by the City Commissioners of Sewers	1,229
11. Market dues and tolls, collected and applied by the City of London Corporation	110,158
12. The same, collected and applied by the Woolwich Local Board, and the market trustees of Whitechapel and St. Saviour	9,139
13. Grain duty and fruit metage, collected and applied by the City of London Corporation	18,051
14. Fees from canal boats, collected and applied by the City of London Corporation	2
15. Burial fees, collected and applied by the vestries, burial boards, and City Commissioners of Sewers.	47,832

16. Fees received from the City of London Court over and above the cost of maintaining the court and of salaries of judges and staff, collected and applied by the City of London Corporation.....	£ 6,039

An important point to note in connection with this indirect taxation is that the area of taxation is not in all cases coincident with the area of administration. Thus the Metropolitan police levy and receive the license fees for hackney-carriages in the City of London, though they have no police jurisdiction within the City; and although the levy extends throughout the entire area of greater London, it is nearly certain that the greater part of the amount is levied within the City and County of London, the result being an injustice to London, namely, that London taxation is not wholly applied to London matters. Secondly, there is the indirect taxation by way of grain duty and market tolls levied and applied by the City of London Corporation. The area of this taxation is far beyond the City boundary, to some extent beyond the County boundary. In respect of the grain duty, the City Corporation are bound by Act of Parliament to apply it to open spaces outside the area of the County, but presumably for the benefit of Londoners primarily, although the anomaly is not quite explained by the benefit which Londoners are supposed to receive from Epping Forest, Burnham Beeches, West Wickham Common, and other places. In respect of market tolls and duties the Corporation apply taxation derived from the County to purposes belonging to the City. This fact is of some importance, considering the frequent complaints of the City that they pay too much towards equalizing the rates of the rest of London. Thirdly, there are the market dues and tolls levied by the local markets of Southwark, Whitechapel, and Woolwich. These taxes are paid by the consumers of an area much larger than the

parishes, though they are applied to the benefit of the parishes only. These are anomalies which generally are not considered in connection with

Authorities.	Expenditure Incurred.	Balances.		Net Charge on Taxation after Accounting for Balances.
		Increased and added to Expenditure.	Decreased and deducted from Expenditure.	
1. *County Authorities*—	£	£	£	£
London County Council	2,042,169	117,802	—	2,159,971
School Board for London	2,330,432	—	48,596	2,281,836
Metropolitan Asylums Board	448,465	—	29,900	418,565
Metropolitan police	1,273,717	—	3,483	1,270,234
2. *District Authorities*—				
City of London Corporation.	257,971	—	44,395	213,576
City Commissioners of Sewers	243,783	24,579	—	268,362
District boards	503,358	24,148	—	527,506
Library commissioners	2,571	—	77	2,494
3. *Union Authorities*—				
Boards of guardians	1,284,724	51,184	—	1,335,908
4. *Special District Authorities*—				
Sick asylum district managers	32,473	—	1,388	31,085
School district managers	120,928	37	—	120,965
Library commissioners	2,496	162	—	2,658
Wards of the city	6,931	34	—	6,965
5. *Parish Authorities*—				
Vestries and local board	1,785,640	—	39,280	1,746,360
Boards of guardians	1,133,498	34,081	—	1,167,579
Overseers, or bodies acting as overseers	178,209	69,410	—	247,619
Library commissioners	54,193	—	714	53,479
Baths commissioners	71,330	6,693	—	78,023
Burial boards	49,121	1,212	—	50,333
Market trustees	2,483	—	780	1,703
Churchwardens	9,898	554	—	10,452
Totals	11,834,390	329,896	168,613	11,995,673

London taxation, but they are nevertheless of some importance when London taxation is being scientifically examined.

Finally, I come to direct local taxation. This amounted, as I have already stated, to £9,904,675, and is imposed by five different classes of authorities, namely, county authorities, district authorities, union authorities, special district authorities, and parish authorities.

Before, however, considering how this amount of expenditure of £11,834,390 actually falls as taxation in London, it is necessary to point out two facts. The first is peculiar to London, namely, that there is considerable difference between the expenditure incurred by the various authorities and the taxation imposed by these authorities. Secondly, there is the increase or decrease of balances which occurred during the year. If a balance is increased, it is increased at the expense of the ratepayers of the year, while if a balance is decreased, the local authority has met part of the year's expenditure out of accumulated balances of past years. In both ways therefore balances affect the amount of expenditure which is finally borne by taxation. The table on p. 211 shows the facts for 1895–96, so that a total expenditure incurred of £11,834,390 becomes a total taxation of £11,995,673.

Comparing this charge on taxation with the taxation imposed by the various authorities, the result is shown in table on p. 213.

In the case of the County Council and the Asylums Board the taxation imposed is in excess of the expenditure incurred, while a wholly new authority, the Local Government Board, appears as a taxing authority without having incurred any expenditure. On the other hand, the City Corporation, the Commissioners of Sewers, district boards, vestries, guardians, and overseers impose less taxation than the expenditure they incur. But in the total the expenditure and taxation amount to the same sum (£11,995,673).

Authorities.	Charge incurred after allowing for Balances Increased or Decreased in the Year.	Taxation Imposed.			
		Appropriation from Imperial Taxes.	Indirect Taxation.	Rates.	Total.
	£	£	£	£	£
1. *County Authorities*—					
London County Council...	2,159,971	87,517	514,863	2,952,322	3,554,702
School Board for London..	2,281,836	650,224	—	1,631,612	2,281,836
Metropolitan Asylums Board	418,565	—	—	422,982	422,982
Metropolitan Police.....	1,270,234	616,347	28,815	625,072	1,270,234
Local Government Board..	—	—	—	1,174,680	1,174,680
2. *District Authorities*—					
City of London Corporation	213,576	—	134,282	78,848	213,130
" Commissioners of Sewers	268,362	—	8,117	252,877	260,994
District Boards	527,506	—	208	337,996	338,204
Library Commissioners....	2,494	—	—	2,494	2,494
3. *Union Authorities*—					
Boards of Guardians.....	1,335,908	—	—	451,503	451,503
4. *Special District Authorities*—					
Sick Asylum District Managers	31,085	—	—	31,085	31,085
School District Managers..	120,965	—	—	120,965	120,965
Library Commissioners....	2,658	—	—	2,658	2,658
Wards of the City.....	6,965	—	—	6,965	6,965
5. *Parish Authorities*—					
Vestries and Local Board..	1,746,360	—	1,793	1,060,645	1,062,438
Guardians.....	1,167,579	—	—	371,706	371,706
Overseers	247,619	—	9,551	225,556	235,107
Library Commissioners....	53,479	—	—	53,479	53,479
Baths Commissioners.....	78,023	—	—	78,023	78,023
Burial Boards	50,333	—	37,578	12,755	50,333
Market Trustees.....	1,703	—	1,703	—	1,703
Churchwardens.....	10,452	—	—	10,452	10,452
	11,995,673	1,354,088	736,910	9,904,675	11,995,673

These differences between expenditure incurred and taxation imposed by the different authorities are caused by the operation of certain equalization funds, which have for their object the equalization of the rates which fall upon the rating units. These funds are as follows:—

Common Poor Fund (Act of 1867, and amending Acts).
County Grants (Act of 1888).
Equalization Fund (Act of 1894).

The Common Poor Fund is administered by the Local Government Board. Certain charges in connection with the maintenance of indoor paupers and lunatics, and for registration and vaccination, incurred by the guardians of the poor of the several parishes and unions in the County, are transferred to this fund, and the amount required to meet them is raised by an equal rate over the metropolitan poor district, *i.e.* the administrative County, excluding Penge.

The County grants are administered by the London County Council. They consist of grants to guardians, sanitary authorities, and overseers, in aid of the following services:—

Guardians of the Poor—

- Pauper lunatics.
- Poor-law medical expenses.
- Registrars of births and deaths.
- Teachers in poor-law schools.
- Indoor poor.

Sanitary Authorities (Vestries and District Boards)—

- Medical officers.
- Sanitary inspectors.
- Main roads.

Overseers—

- Registration of electors.
- Drowned bodies.

The rates to meet these grants are levied over the whole County, with the exception of that for drowned bodies, which is charged on the special County rate, and is therefore not levied on the City.

The Asylums Board also administers a small amount of grants. These are repayments to local authorities of fees paid for the notification of infectious diseases, under the Public Health Act, 1891.

The rate to meet these grants is charged, along with the rest of the expenses of the Asylums Board, upon the Metropolitan Asylums District, which is not identical with the county.

The Equalization Fund is administered by the London County Council. It consists of a rate of 6*d.* in the £ levied annually on the whole County, and redistributed among the sanitary authorities on the basis of population.

The effect of these funds is to relieve parish, union, and district expenditure at the expense of County rates. The total transfer of charge thus made in 1895–96 was £2,573,828.

Before dismissing this important subject of equalization, it should be pointed out how cumbersome is the machinery at present adopted. The system has been allowed to grow without considering the effect of each stage of the growth upon the preceding stage. At the time of the institution of the Common Poor Fund in 1867 there was no County authority and no other Equalization Fund. Now there is a County authority and two other equalization funds administered by that authority. The overlapping of jurisdictions is not conducive to administrative efficiency. Take, for instance, the case of lunacy. The whole charge for pauper lunatics is now a County charge, but it becomes so in the following tortuous manner. First, there is the county lunacy administered by the County Asylums Committee, and paid for by the County rate. Secondly, there is the local lunacy administered by the thirty boards of guardians, but paid for partly by the common County charge of the Metropolitan Asylums Board, partly by the grant from the County Fund of 4*s.* per head per week, and partly by the Common Poor Fund. All this machinery to produce so simple a result as a common County charge for London lunacy must be productive of unnecessary expense,

if not inefficient administration, and at all events the London County Council employs a staff to examine the guardians' lunacy accounts for the purpose of determining the amount of the grants, which are also examined by the Local Government Board for the purpose of determining the amount to be paid by the Common Poor Fund. Now that the Council is charged with the duty of disbursing certain County grants, and with the duty of administering the Equalization Fund, it should also be charged with the administration of the Common Poor Fund, subject to some simplification of method. Payments out of the fund could be made on the certificate of the Local Government Board as at present, so that no change would be made in the machinery of control, but only in the machinery of administration.

But the whole question of separating the spending authority from the taxing authority needs the most careful consideration. The plan seems to be extending, and is just one of those insidious methods of getting rid of difficulties which are so dear to the politician's mind. It is, however, full of mischief. It leads to extravagance and it prevents any responsibility being fixed. One authority contracts liabilities which another authority has to pay for, and members of the paying authority have to face questions and difficulties before the electors which are not theirs to face. Nothing is more common in London than to hear the County Council blamed for increasing the rates. As a matter of fact they have not increased rates one farthing. They have to collect more money in order to again distribute among local authorities, who are responsible for a greatly increased expenditure throughout London; and until Londoners endeavour to understand the enormous dangers attending the present system of equalization of rates, as it is called, they will find affairs tending towards an enormously increasing

annual expenditure. There is another danger arising from the great complexity of the present system of taxation and the absolute impossibility of obtaining exact information about it. The government publish *Local Taxation Accounts* annually, but there is nothing in these voluminous documents which will enable the taxpayer to ascertain the taxation of his county, let alone that of his district, his union, or his parish. Instead of simplicity we get complexity, and no effort is ever made to remedy this reprehensible state of things; nor will anything be done until the London public possess the knowledge which is the creating force of public opinion. That this volume may help in some measure in spreading the needful light, I humbly but devoutly hope. The story of Victorian London has been a record of progress and of wonders; but throughout its course may be traced the same truth and lesson. The rapidity of the progress made and the vastness and multiplicity of the changes during sixty eventful years of our nation's history has involved a long chain of anomaly, abuse, and imperfections of various kinds which challenge the intelligence and the energy of Londoners and their leaders to-day.

Appendix I.

The following extracts are given to show the almost incredible condition of portions of London (see p. 57).

An article in a leading medical newspaper, *The Lancet*, in July, 1855, thus describes the state of the river:—

"The waters of the Thames are swollen with the feculence of the myriads of living beings that dwell upon the banks, and with the waste of every manufacture that is too foul for utilization. Wheresoever we go, whatsoever we eat or drink within the circle of London we find tainted with the Thames. . . . No one having eyes, nose, or taste, can look upon the Thames and not be convinced that its waters are year by year, and day by day, getting fouler and more pestilential. The Thames water is already so turbid that the lower part of a bit of card, sinking edgeways, is invisible before the upper part has become immersed. The abominations, the corruptions we pour into the Thames are not, as some falsely say, carried away into the sea. The sea rejects the loathsome tribute, and heaves it back again with every flow. Here, in the heart of the doomed city, it accumulates and destroys."

On June 11th, in the House of Commons, "Mr. Brady wished to ask whether the noble lord had taken any means to mitigate the effluvium from the Thames. Hon. members sitting in the committee-rooms and library were scarcely able to bear it."—(*Times*, June 12th, 1858.)

On June 18th, "Mr. Mangles said," in the House of Commons, "that when he was a young man Thames salmon were celebrated. The salmon, wiser than members of parliament, had avoided the pollution, and he was informed that cartloads of fish were taken out of the Thames which had died in consequence of the state of the river. A noble mansion was prepared for the right hon. gentleman who occupied the chair, but could any hon. gentleman expect the Speaker to live in an atmosphere into which they would not put their worst enemy? They had built on the banks of the Thames a magnificent palace for the legislature, but how could they direct the attention of any foreigner to it when he would be welcomed by a stench which was overpowering?"—(*Times*, June 19th, 1858.)

"What a pity it is that the thermometer fell ten degrees yesterday. Parliament was all but compelled to legislate upon the great London nuisance by the force of sheer stench. The intense heat had driven our legislators from those portions of their buildings which overlook the river. A few members, indeed, bent upon investigating the subject to its very depth, ventured into the library, but they were instantaneously

driven to retreat, each man with a handkerchief to his nose. We are heartily glad of it. It is right that our legislators should be made to feel in health and comfort the consequence of their own disregard of the public welfare. . . . As long as the nuisance did not directly affect themselves, noble lords and hon. gentlemen could afford to disregard the safety and comfort of London; but now that they are fairly driven from their libraries and committee-rooms—or, better still, forced to remain in them with a putrid atmosphere around them—they may perhaps spare a thought for the Londoners."—(Leading article in *The Times*, 18th June, 1858.)

"I am one of those unfortunate lawyers who 'hug the festering shore', and festering it is indeed with a vengeance. The stench in the Temple to-day is sickening and nauseous in the extreme; we are enveloped in the foul miasma which spreads on either side of this repository of the filth of nigh three millions of human beings, and day and night every breath of air which we draw for the sustenance of life is tainted with its poisonous exhalations."—(Letter signed T. S., in the *Times* of June 18th, 1858.)

The Earl of Shaftesbury gave to the Royal Commissioners on the Housing of the Working Classes, in 1884, some striking testimony as to the bad sanitary conditions amid which the poor in some quarters of the town were compelled to live in the earlier days of his labours among them. The following are a few extracts from the official report of his evidence:—

"Formerly there were a great many long alleys, and when I used to go into them, if I stretched out my arms I struck the walls on both sides. They were very long, like a tobacco pipe. In those alleys lived from 200 to 300 people, and there was but one accommodation for the whole of that number, and that at the end; and I do not hesitate to say that it was so tremendously horrible that one could not even approach that end. . . . The air was dreadfully foul. The sun could not penetrate, and there never was any ventilation. (Q. 31 and 32.)

"There was the famous Frying-pan Alley, near Holborn, now swept away. I inspected the whole of Frying-pan Alley, and I am happy to say that such a thing does not exist now in London, and could not exist, because the attention of the officer of health and others would be called to it, and it would be abolished. Frying-pan Alley was a very famous alley in Holborn, like one of those I have described to you; it was very narrow, the only necessary accommodation being at the end; in the first house that I turned into there was a single room, the window was very small, and the light came through the door. I saw a young woman there, and I asked her if she had been there some little time. 'Yes,' she said, 'her husband went out to work, and was obliged to come there to be near his work.' She said, 'I am miserable!' 'What is it?' I asked. 'Look there,' said she, 'at that great hole; the landlord will not mend it. I have every night to sit up and watch, or my husband sits up to watch,

because that hole is over a common sewer, and the rats come up, sometimes twenty at a time, and if we did not watch them they would eat the baby up.' I am giving you that as a typical instance of what went on in London at that time. That could not exist now." (Q. 36.)

"Such a thing as occurred in Tyndall's Buildings could not exist now, but it will show you what I believe occurred in a great number of instances. I was sitting in this very room, in the Board of Health, and a person came to me and said that he had discovered something in Tyndall's Buildings which he thought I ought to see. This was before we got possession of the court. I went off directly with Dr. Southwood Smith; I went into a low cellar, and there I saw what your lordship will hardly believe. There was not so much wood in it as would make a faggot. There were a woman and two children there, but the striking part of it is this: from a hole in the ceiling there came a long open wooden tube supported by props, and from that flowed all the filth of the house above, right through the place where this woman was living, into the common sewer. Nobody paid the least attention to it. There were no health officers, and no people looking after the matter; and I believe much of that sort of thing occurred in London which could not occur now." (Q. 37.)

"There was a famous place called Bermondsey Island, in Bermondsey. You should know something about that, because I do not know that such a thing could occur again, it is hardly credible. It was a large swamp; a number of people lived there, as they do in Holland, in houses built upon piles. Only two days ago I met a gentleman, with whom I had inspected that place twenty years before. He put me in mind of it, and he said that it was now completely drained and houses built upon it. So bad was the supply of water there, that I have positively seen the women drop their buckets into the water over which they were living, in which was deposited all the filth of the place, that being the only water that they had for every purpose—washing, drinking, and so on." (Q. 141.)

Appendix II.

Analysis of Robson's London Directory, 1837, pp. 1029–1500 (see p. 86).

Accountants	107	Agents (*continued*)—	
Acetic acid manufacturers ...	7	Lead	1
Agents—		Metal	2
Ale and porter	23	Miscellaneous	59
Army and navy	36	Parliamentary	21
Brewery	6	Patent	4
Custom-house	61	Provision	10
East India	38	Shipping	47
Estate and house	93	Silk	5
Foreign	10	Tea	8
General and commercial ...	190	Tin	1
Iron	6	Agricultural-implement makers	9

Anatomical machinists ... 3
Anchor smiths and chain-cable manufacturers 24
Animal and bird preservers 18
Annatto manufacturers ... 5
Anti-corrosion paint manufacturers 5
Antimony refiners 3
Aqua-fortis manufacturers ... 4
Archery warehouses 8
Architects and surveyors ... 324
Army cap and accoutrement makers 22
Army clothiers 23
Army contractors 3
Artificial-eye makers 2
Artificial flower and feather makers 67
Artificial leg and arm makers 6
Artists 208
Artists in fireworks 9
Assayers 3
Attorneys of Lord-mayor's court 7
Auctioneers, appraisers, estate and house agents 432
Auctioneers and surveyors ... 35
Aurists 4
Awl-blade makers 3
Back makers 5
Bacon dryers 14
Bakers 1982
Ball and rout furnishers ... 4
Barge and boat builders ... 56
Barometer and thermometer makers 25
Barristers 1103
Basket makers 56
Bath manufacturers 5
Baths, warm and cold, &c. ... 28
Bead makers 5
Bed and mattress makers ... 60
Bed-sacking manufacturers ... 11
Bed-screw makers 4
Bedstead makers 48
Bellows makers 9
Billiard and backgammon table makers 12
Birch-broom dealers 2
Birmingham and Sheffield warehouses 51
Blacking makers 34
Blacklead-pencil makers ... 24
Bleachers, linen 4
Bleachers, wax 6
Blind makers, window- ... 103
Blue manufacturers 13
Bombazine warehouses ... 7
Bone boilers 12
Bone mould and counter cutters 3
Bonnet-shape manufacturers 6
Book and print sellers ... 23
Bookbinders 201
Book lock and clasp makers 5
Bookseller, agricultural ... 1
Bookseller, architectural and scientific 1
Booksellers, foreign 22
Booksellers, law 15
Booksellers, medical 7
Booksellers, military 2
Booksellers and binders ... 24
Booksellers and circulating libraries 23
Booksellers and newsvendors 19
Booksellers and publishers ... 455
Boot and shoe makers ... 1541
Boot-top manufacturers ... 3
Bougie and catheter manufacturers 3
Brace, stock, and belt makers 42
Brass manufacturers 61
Braziers 42
Breeches makers 38
Brewers 153
Brick and tile makers and dealers 12
Bricklayers and plasterers ... 429
Brick-mould maker 1
Bridle-bit and stirrup makers 6
Bridle cutters 6
Bristle assorters 5
Brokers—
Bill and discount 32
Bullion 2
Colonial, coffee, and sugar 96
Cotton 8
Diamond 1
Drug 13
Drug and drysaltery ... 9
Drug and spice 9
East India and drysaltery ... 11
Exchange 7
Fruit 5
Furniture 406
General and commercial ... 45
Hide and skin 7
Indigo 22
Insurance 97
Ivory and tortoiseshell ... 1
Mahogany 3

Brokers (*continued*)—
Metal... 1
Oil 6
Piece 9
Printers' 9
Provision 8
Russia 36
Ship and insurance... ... 150
Silk 15
Stock 277
Tea 15
Timber and wood 7
Tobacco 4
Wine and spirit 20
Wool 24
Bronzists 3
Brushmakers 198
Brushmakers and turners ... 43
Buhl manufacturers 3
Builders... 392
Builders and bricklayers ... 25
Building-material dealers ... 30
Bullion dealers... 12
Bunting and say manufacturers... 3
Butchers and meat salesmen 1492
Button manufacturers and warehouses 39
Cabinet and chair makers ... 438
Calico and furniture printers... 43
Calico glazers 6
Camel-hair pencil makers ... 12
Candle-rush manufacturer ... 1
Cane dealers 5
Cane workers 6
Canvas manufacturers ... 4
Cap makers 16
Capillaire makers 7
Card makers 15
Carmen 80
Carpenters 1145
Carpenters and packing-case makers 35
Carpet and rug manufacturers and warehouses 100
Carpet-bag manufacturers ... 2
Cart and mill grease manufacturers... 5
Carvers 30
Carvers and gilders 309
Chair and sofa makers ... 87
Charcoal dealers 10
Chasers 52
Cheesemongers 976
Chemical apparatus manufacturers... 4
Chemist and druggists ... 516
Chemists, manufacturing ... 51
Child-bed linen warehouses ... 56
China, glass, and Staffordshire dealers 331
China dealers, foreign ... 6
Chiropodists 4
Chloride warehouses 2
Chocolate makers 7
Chop houses 21
Clock makers 50
Clock-case makers 6
Clothiers and cloths salesmen 152
Clothworkers, pressers, and packers 18
Club-houses 31
Coach and harness makers ... 268
Coach and horse repositories 27
Coach brokers 6
Coach draughtsmen 1
Coach joiners 13
Coach painters 13
Coach platers and founders ... 37
Coach smiths 29
Coach spring and axletree makers 20
Coal dealers 120
Coffee and cocoa-nut roasters 10
Coffee dealers 26
Coffee-rooms 274
Coffin-furniture manufacturers 8
Collar makers 6
Colourmen, artists' 21
Colourmen, wholesale ... 54
Comb makers 45
Composition-ornament manufacturers 22
Composition-ornament and papier-mache manufacturers 6
Confectioners, wholesale ... 24
Conveyancers 36
Coopers... 216
Oil 1
Sugar 3
Wine 49
Copper and brass-plate workers 10
Copper-nail makers 2
Coppersmiths 22
Coppersmiths and braziers ... 28
Cork manufacturers 56
Corn dealers 396
Cotton (lamp and candle-wick) manufacturers 13
Cotton (sewing) manufacturers 23
Cotton-yarn manufacturers ... 17
Court-plaister manufacturers 3

Cowkeepers and dairymen ... 314
Crape manufacturers 9
Cricket bat and stump makers 2
Cudbear manufacturers ... 2
Cuppers... 13
Curiosity dealers 44
Curriers and leather sellers ... 180
Cutlers 153
Cutlers, sword... 11
Dentists... 105
Dentists and cuppers 28
Diamond and pearl setters ... 6
Diamond polishers 2
Die sinkers 2
Distillers, perfume 1
Distillers, turpentine 5
Distillers and rectifiers ... 54
Dollmakers 7
Drawing-instrument makers... 2
Dressing-case and desk makers 70
Druggists, wholesale 65
Drug grinders 8
Drysalters 56
Dyers 140
Cotton 4
Feather 1
Fur and skin 11
Hat 5
Leather 7
Silk 54
Silk stocking 3
Worsted 2
Dyers and calenderers ... 8
Dyers and scourers 90
East India warehouses ... 4
Eating-houses 186
Ebony inkstand makers ... 3
Egg dealers and merchants ... 31
Embroiderers 22
Emery and glass-paper makers and dealers in black-lead ... 16
Engine makers, fire 4
Hydraulic 1
Steam 2
Engine turners... 23
Engineers 94
Engineers, civil 35
Engineers and machinists ... 11
Engravers 190
Glass 5
Historical 7
Map and chart 7
Music 6
Seal and die sinkers ... 50
Vignette 3
Watch and clock 2
Engravers (*continued*)—
Wood 16
Engravers and bookbinders' tool cutters 12
Engravers and printers ... 169
Factors 11
Blackwell Hall 45
Boot and shoe 4
Cheese 10
Coal 23
Corn, flour, and seed ... 95
Fish 32
Flannel 6
Flour 22
Hide and leather 37
Hop and seed 44
Irish 1
Linen and cotton 29
Malt 5
Nail 2
Plate 1
Plate-glass 2
Sail-cloth 3
Scotch 8
Woollen 17
Fan makers 2
Fan and sky-light makers .. 12
Fancy repositories 11
Farriers and smiths 138
Feather-bed manufacturers ... 14
Feather manufacturers, military 3
Fellmongers 29
Fender and fire-iron manufacturers 8
Figure-makers, plaster of Paris 7
Wax 2
File, rasp, and saw makers ... 18
Filter manufacturers 9
Fire-box manufacturers ... 5
Fire-brick dealers 3
Fishing-rod, &c., makers ... 31
Fishmongers 314
Fixture dealers 16
Flag and banner makers ... 2
Flannel and baize manufacturers 9
Flatting mills 8
Flax dressers 4
Flax-hackle makers 1
Flax-spinners and bleachers 3
Flock manufacturers 6
Floorcloth manufacturers ... 29
Florists 30
Flute manufacturers 14
Founders, bell 5

Founders—
- Brass 121
- Clock 27
- Iron 68
- Stereotype 11
- Type 12

Frankfort-black makers ... 3
French horn and trumpet makers 13
French polishers 18
Fringe, bed-lace, and trimming manufacturers ... 46
Fruiterers 565
Funeral-carriage masters ... 8
Funeral-feather men 3
Furriers 163
Fur-skin dressers 16
Gaboon and double manufacturers 10
Gambroon manufacturers ... 4
Gas apparatus manufacturers 9
Gasfitters 77
Gauge dressers 2
General salesmen 49
German paste manufacturers 1
Gilders, book-edge and card 8
Gilders, water 28
Glass benders 8
Glass cutters, window- ... 47
Glass-cutters' tool maker ... 1
Glass enamellers and stainers 18
- Manufacturers, warehousemen, and cutters ... 103
- Crown 7
- Plate 13
- Grinders 4
- Scallopers 2
- Shade makers 7
- Warehousemen, lamp ... 7
- Warehousemen, medical ... 6

Globe makers 6
Glovers and glove manufacturers 68
Glue and size makers 16
Gold cutters 7
Gold and silver beaters ... 59
- Casters 6

Gold and silver lace manufacturers 26
Goldsmiths and jewellers ... 140
Gold-thread manufacturers ... 2
Granary keepers 34
Grindery dealers 32
Groat manufacturers 3
Grocers, wholesale 44
Grocers and cheesemongers ... 430
Grocers, oilmen, and Italian warehousemen 85
Grocers and tea-dealers ... 1475
Gun and cannon lock makers 4
Gun and pistol makers ... 83
Gun and pistol warehouse ... 5
Gun-barrel makers 6
Gun-case makers 6
Gun-stock makers 2
Gunpowder makers 8
Haberdashers and haberdashers and silk mercers ... 288
Hairdressers and perfumers ... 412
Hair manufacturers 65
Hair workers 10
Ham and tongue dealers ... 58
Hame and chain makers ... 2
Hardwaremen 52
Harness makers 68
Harp makers 9
Hat- and bonnet-box makers 2
Hat-block makers 5
Hat-felt manufacturers ... 3
Hat makers, leather 2
Hatters and hat manufacturers 484
Hatters' bow-string makers ... 2
Hatters' trimming makers ... 10
Hay compressor 1
Hay salesmen 17
Hearth-rug manufacturers ... 17
Herbalists 23
Hinge and door-spring manufacturers 2
Hoop benders 5
Horse slaughterers 9
Hosiers, wholesale 34
Hosiers and glovers 267
Hot-house builders 7
Hot-pressers 20
Ice-pail manufacturer ... 1
Importers of—
- Ancient furniture 4
- Beads 8
- Black-lead 1
- Carpets 3
- Cigars 18
- Coker-nuts 2
- Dutch rushes 1
- Foreign and musical clocks and watches 4
- Foreign fancy goods ... 34
- Foreign silk goods 9
- Fruits 5
- Geneva-watch tools and materials 3

Importers of—
Glass shades 2
Gloves 3
India condiments 1
Irish provisions 5
Lace 2
Leeches 7
Musical instruments ... 1
Shawls 2
Toys 10
Wine and liqueurs 40
Zinc 1
India-rubber dealers and manufacturers 17
Inkmakers, printers' 13
Writing 17
Irish-linen warehouse ... 3
Iron-fence and hurdle makers 10
Ironmongers 269
Coach 4
Coopers' 1
Saddlers' 7
Iron-plate workers 22
Iron (cast) warehouses ... 6
Iron warehouses, scrap- ... 2
Isinglass dealers 6
Italian warehouses 77
Ivory and bone stainer ... 1
Ivory and tortoiseshell workers 15
Japanners 55
Jelly-mould makers 4
Jewellers 366
Black 4
Diamond 1
Gilt 9
Jewellers' hair-workers ... 5
Jewellery-case makers ... 15
Job-masters and hackney men 43
Lace cleaners and menders ... 14
Lace manufacturers, coach ... 22
Lacemen 87
Lacquer manufacturers ... 1
Ladder makers 3
Lamp manufacturers 67
Lamp and lustre manufacturers 13
Lamp and oil warehouses ... 9
Lamp-black manufacturers ... 7
Lanthorn-leaf and horn-plate manufacturers 5
Lapidaries 36
Last, boot-tree, and pattern makers 60
Lasting and Denmark satin manufacturers 6
Lath renders 18

Lathe and tool makers ... 18
Lead manufacturers, milled ... 13
Leather cutters and sellers ... 152
Leather dressers 47
Morocco 15
Leather gilders 2
Japanners 7
Pipe and Fire-bucket makers 7
Portmanteau and case makers 3
Splitters 1
Stainers 3
Libraries, circulating 58
Musical 2
Licensed retailers of beer ... 125
Licensed victuallers 4035
Lightermen 105
Lighthouse manufacturer ... 1
Lime burners 18
Linen drapers 662
Linen warehousemen and manufacturers 39
Lint manufacturers 4
Livery-stable keepers and horse dealers 320
Locksmiths and bell-hangers 100
Looking-glass frame and picture-frame makers ... 56
Looking-glass silverers ... 7
Lozenge manufacturers ... 7
Macaroni manufacturers ... 2
Machine rulers 17
Machinists 31
Maltsters 17
Mangle and press makers ... 15
Manifold-writer makers ... 4
Map draughtsman 1
Map mounters 4
Map and chart publishers and sellers 18
Map and print colourers ... 5
Marine-store dealers 51
Marquee and tent makers ... 5
Masquerade and fancy-ball dress makers 4
Masquerade warehouses ... 2
Mast, oar, and block makers 47
Mat and matting warehouses 16
Mathematical, optical, and philosophical instrument makers 149
Measure makers, corn and coal 8
Medallists 2
Medical label warehouses ... 10
Melting-pot makers 5
Merchants, general 1277
Ale and porter 66

Merchants (*continued*)—
Alum 2
Bone 7
Bottle 54
Brick and tile 12
Coal 320
Cochineal 2
Colour 1
Copper 21
Cork 8
Corn 37
Corn and coal 45
Cotton 3
Cyder 25
Diamond 10
Drug and spice 8
Dyewood 2
East India 7
Feather 4
Flax and Hemp 4
Flint 1
Fur and skin 9
Ham 3
Hoop 7
Hop and seed 55
India-rubber... 4
Indigo 6
Iron 52
Iron Hoop 1
Italian 2
Ivory and tortoiseshell ... 8
Lead and glass 45
Leather 8
Leech 1
Lime 19
Lisbon 1
Madeira 3
Mahogany and timber ... 212
Marble 7
Oil 50
Oporto 5
Orange 106
Rag 48
Rush 3
Russia and bristle 31
Salt 12
Silk 12
Slate 19
Stave 6
Stone... 34
Tallow 4
Tin and tinplate 11
Turkey 5
West Indies 46
Whisky 16
Wine and wine and spirits 833

Merchants (*continued*)
Wool 25
Zinc 5
Metal warehouses 13
Military cockade maker ... 1
Ornament maker 5
Sashmaker 2
Military warehouses 3
Millers 25
Milliners and dressmakers ... 594
Millmakers 16
Millstone makers 5
Millwrights and engineers ... 57
Mineralogists 2
Miniature-frame makers ... 4
Modellers 16
Morocco-case makers... ... 10
Mourning-ring makers ... 7
Musical-instrument makers ... 64
Reed maker 1
Tube drawer 1
Musicsellers and publishers ... 108
Muslin and gauze manufacturers... 13
Mustard manufacturers ... 14
Nailmakers 4
Nail tinner 1
Needle and pin makers ... 29
Newsvendors 149
Notaries 37
Nursery and seedsmen ... 41
Oculists... 5
Official assigners 15
Oilmen and Italian warehousemen 186
Oilmen and oil and colourmen 636
Oilmen and tallow chandlers... 28
Oil of tartar manufacturers ... 2
Orchill makers... 6
Organ builders 24
Ormolu manufacturers ... 4
Outfitters 65
Oven builders 10
Packers and calenders ... 38
Painters, transparent blind ... 9
Painters and decorators ... 127
Painters and grainers... ... 46
Painters, herald 18
Sign 7
Paper black borderers ... 2
Paper makers 9
Paper marblers and fancy paper makers 21
Paper-mould makers 1
Paper stainers and hangers ... 134

Parchment makers and dealers 12
Pasteboard makers and hot pressers 10
Pastry cooks and confectioners 300
Patents—
Antigropelos 1
Artificial skin manufacturer 1
Axletree makers 10
Bankers' check-paper manufacturer 1
Blowing-machine manufacturer 1
Chandelier line manufacturer 1
Closetaire manufacturer ... 1
Coachbuilder 1
Cocoa-nut-oil candle manufacturer 1
Columbian printing-press manufacturer 1
Corrugated iron roof, door, and shutter manufacturer 1
Emery and glass cloth manufacturer 1
Ever-pointed pencil and portable pen manufacturer ... 1
Felt manufacturer 1
Fleam manufacturer ... 1
Fountain pump works ... 1
Gas and steam wrought-iron tube manufacturer ... 1
Gas-cooking apparatus and gas hot-air stoves ... 2
Groats and pearl-barley manufacturer 1
Gunpowder-barrel maker ... 1
Hinge maker 1
Hot-house curvilinear-bar maker 1
Hot-water apparatus for warming buildings ... 1
Improved dining-table fastener 1
India-rubber and elastic-web brace manufacturer ... 3
India-rubber waterproof-cloth manufacturer ... 1
Iron-tank manufacturer ... 1
Lava stone for roads, stables, &c. 1
Leather-cloth or pannus-corium boot and shoe manufacturer 1
Lock manufacturers ... 5
Maltsters 5
Medicine warehouses ... 40
Patents (*continued*)—
Metallic candle-wick and wax-candle makers ... 1
Metallic chimney-lining manufacturer 1
Metallic circlets 1
Metallic gun-wadding ... 1
Metallic piston manufacturer 1
Metallic ship-sheathing fastenings, &c. 1
Muntz's patent metal for ship-sheathing 1
Paddle-wheels 1
Pepper manufacturer ... 1
Perrzian pen manufacturer 1
Pianoforte manufacturers ... 2
Pin and needle manufacturers 2
Plough and agricultural implement maker 1
Pump makers 4
Recumbent chair manufacturer 1
Sash-line and upholsterers' tine manufacturers ... 2
Self-acting invalid chair ... 1
Self-relieving hook manufacturer 1
Ship-windlass manufacturer 1
Smoke-consuming furnaces 1
Spur 1
Stanhope printing-press maker 1
Stomach-pump and self-injecting clyster apparatus maker 1
Stoppings for horses' feet and anti-crib biter 1
Syringe, poison and enema 1
Tanks for preserving timber from dry-rot, decay, &c.... 2
Waterproof leather manufacturers 8
Wheel manufacturer, iron... 1
White lead 2
White leghorns 1
Wine-fining-powder manufacturer 1
Wire-cartridge manufacturer 1
Zincographic printers ... 1
Pattern drawers 5
Pattern ring and tie makers ... 2
Paviours 11
Pawnbrokers 350
Pearl and bead setters and stringers 13

Pearl worker 1
Pen and quill makers... ... 26
Pen manufacturers, steel ... 12
Pencil-case manufacturers ... 5
Percussion-cap manufacturers 5
Perfumers 89
Pewterers 61
Physicians 229
Pianoforte makers 136
Picture cleaners 13
Dealers 53
Liners 3
Pill and pasteboard box manufacturers 15
Pin makers 11
Pink saucers warehouse ... 1
Pitch and tar manufacturer 1
Plane and tool makers ... 16
Planishers 1
Plaster of Paris manufacturers 10
Plasterers 55
Plate-case makers 9
Plate manufacturers, British 6
Plumbers, painters, and glaziers 948
Pocket-book makers 34
Porkmen 65
Potato dealers 197
Potters 25
Poulterers 159
Printers 390
Copperplate 56
Lithographic 43
Music 4
Silk 5
Printers and stationers ... 41
Printers, calico, and paper stainers, block makers ... 2
Printers' joiners 4
Roller manufacturers ... 2
Smiths and brass-rule cutters 8
Printing-press makers ... 13
Printsellers and publishers ... 63
Theatrical 3
Proctors 86
Projecting-letter manufacturers 12
Pump makers 22
Putty-powder manufacturers 4
Rag and phial dealers ... 32
Razor makers 5
Razor-strop makers 8
Ready-made linen warehouse 27
Reed and hay makers ... 4
Refiners, gold and silver ... 26
Coal tar 1
Riband dressers 5
Roasting-jack makers ... 8
Robe makers 9
Rocking-horse makers ... 4
Roman cement makers ... 19
Rope, line, and twine manufacturers 98
Rouge and carmine manufacturers... 3
Rubbish carters and scavengers 20
Ruby and rhodium pen manufacturers 2
Rule makers 8
Sack, bag, and sacking manufacturers 22
Sack collectors 5
Sack-hire warehouses ... 6
Saddlers and harness-makers 233
Saddle-tree makers 13
Sail-cloth warehouses ... 8
Sail-makers, sail-cloth, and tarpaulin manufacturers ... 78
Salesmen, butter 7
Cattle 126
Oyster 3
Saltpetre refiners 3
Sash makers 17
Saw and tool makers 37
Saw-mills 23
Scagliola manufacturers ... 6
Scale and scale-beam makers 49
Scale-board cutters 2
Scotch snuff-box maker ... 1
Sculptors 43
Scum boilers 2
Sealing-wax and wafer manufacturers 24
Seed crushers 7
Seed-oil refiner 1
Seedsmen 41
Segar manufacturers 10
Semolina manufacturer ... 1
Shawl cleaners and dressers ... 4
Shawl manufacturers and warehousemen 36
Ship Breakers 11
Builders 28
Carvers 4
Chandlers 56
Ships' hearth and tank makers 5
Joiners 7
Owners 27
Smiths 13
Shoe-mercers 9
Shorthand writers 9
Shot manufacturers 2
Sieve makers 4

Silk and cotton warehouses 4
Silk and satin drapers ... 11
Silk and silk and riband manufacturers and warehousemen 198
Silk manufacturers (sewing) and silkmen 10
Silk-gauze manufacturers ... 10
Silk hose manufacturers ... 2
Silk machine makers 7
Silk mercers 83
Silk-shag manufacturers ... 6
Silk-purse manufacturer ... 1
Silk winders 2
Silver and plated manufacturers 6
Mounters 2
Silver platers 17
Silver polishers 3
Silversmiths and jewellers ... 184
Silver spoon and fork manufacturers 10
Silver thimble makers ... 5
Silver turners and polishers ... 5
Slaters 24
Slopsellers 94
Smith and stone-grate makers 341
Smoke-jack makers 8
Soap manufacturers 50
Soda and mineral-water and ginger-beer makers ... 51
Soda-water machine maker ... 1
Solicitors and attorneys ... 2011
Soot dealers 2
Spectacle makers 19
Spermaceti refiners 5
Spice dealers, wholesale ... 13
Spinal bandage makers ... 2
Sponge dealers 10
Spur makers 7
Starch manufacturers ... 6
Stationers and account-book makers 419
Stationers and bookbinders ... 28
Stationers and booksellers ... 432
Stationers and newsmen ... 38
Stationers and paper-hangers 6
Stationers and print-sellers ... 16
Stationers, fancy 31
Stationers, law and law-writers 146
Statuaries and masons ... 143
Stay and corset makers ... 210
Steam cooking-apparatus makers 3
Steam-engine boiler makers ... 9
Steel manufacturers 7
Stencillers 7
Stone-saw manufacturer ... 1
Straw, leghorn, and chip-hat manufacturers 292
Straw-hat pressers and bleachers 16
Straw-plait warehouses ... 17
Stuff manufacturers 17
Sugar refiners 51
Surgeons and surgeons and apothecaries 1475
Surgeons' instrument makers 48
Swansdown-puff maker ... 1
Table-cover and painted-baize makers 12
Table knife and fork makers 7
Tailors and tailors and drapers 1809
Tailors' trimmings sellers ... 49
Tallow chandlers and melters 242
Tan-dealers 2
Tanners 59
Taverns, hotels, and inns ... 463
Tea dealers, wholesale ... 83
Tea and coffee dealers ... 81
Teapot-handle makers ... 2
Tea-tray warehouses, paper ... 5
Tea-urn manufacturers ... 7
Timber benders 7
Timber and deal yards ... 28
Tin-foil beaters 3
Tin-pipe manufacturers ... 4
Tin-plate workers 216
Tobacconists 545
Tobacco-pipe makers ... 44
Tool warehouses 39
Tooth-brush manufacturers ... 13
Toy manufacturers, pewter ... 4
Toymen and toymen and turnery dealers 141
Translators and professors of languages 16
Trimming makers, fancy ... 60
Tripemen 33
Trunk makers and military and camp equipage manufacturers 92
Truss makers 40
Truss-hoop manufacturers ... 2
Turners, general 156
Brass 6
Gold 3
Ivory and hardwood ... 60
Optical 6
Oval 5
Turpentine manufacturers ... 4
Tyre smiths 6
Umbrella and parasol makers 124
Umbrella-furniture manufacturers 5

Undertakers 340
Underwriters 4
Upholsterers and upholsterers and cabinetmakers 520
Upholsterers' warehousemen 6
Varnish manufacturers and varnish and colour manufacturers 50
Vellum binders 36
Venison dealers 6
Vermicelli manufacturer ... 1
Veterinary surgeons 56
Veterinary surgeons' instrument makers 3
Vinegar makers 15
Violin and violoncello makers 7
Violin, harp, and bow-string makers 14
Vitriol manufacturers ... 12
Wadding manufacturers ... 7
Walking- and umbrella-stick makers 12
Warehouse keepers 12
Warehousemen, Manchester and Scotch 247
French 9
Watch and clock and chronometer maker 515
Watch balance, wheel, and fusee makers 2
Watch-cap makers 9
Watch-case gilders 18
Watch-case-joint finishers ... 3
Watch-case makers 43
Watch enamellers 14
Escapement makers ... 6
Finishers 3
Glass-makers 13
Gold-hand makers 6
Index maker 1
Jewellers 13
Key maker 1
Watch movement makers ... 15
Pendant makers 3
Pinion makers 2
Watch springers and liners ... 31
Watch and clock main-spring makers 6
Tool makers 9
Water-closet manufacturers ... 10
Waterproof-cloth manufacturers 6
Wax and tallow chandlers ... 109
Well diggers and borers ... 3
Whalebone cutters 9
Whaling-lance and harpoon makers 2
Wharfingers 127
Wheelwrights 157
Whip makers 36
White-lead manufacturers ... 18
Whiting makers 8
Wig makers 17
Willow-square manufacturers 9
Wine dealers, British 15
Wine-fining manufacturers ... 4
Wire drawers 27
Wire workers and wire weavers 81
Wire and metal warehouses ... 5
Wood-engravers' boxwood preparer 1
Woollen drapers 160
Woollen manufacturers and warehousemen 85
Wool staplers 32
Wool and cotton wool-card maker 1
Worm makers 10
Worsted manufacturers ... 20
Worsted and silk shag and mohair manufacturers ... 4
Yarn warehouses 20
Yeast dealers 10
Zincographers 1
Zinc workers 16

Appendix III.

OCCUPATIONS OF MALES AND FEMALES FROM THE CENSUS OF 1851 (see p. 86).

	Under 20 years of age.		20 years of age and upwards.	
	Males.	Females.	Males.	Females.
Total	474,013	493,260	632,545	762,418
Persons of specified occupations and conditions	472,388	488,759	621,198	749,124
CLASSES.				
Class.				
I. Persons engaged in the general or local government of the country	367	7	18,960	219
II. Persons engaged in the defence of the country	1,101	—	17,946	—
III. Persons in the learned professions (with their immediate subordinates) either filling public offices or in private practice	2,631	28	21,782	656
IV. Persons engaged in literature, the fine arts, and the sciences	861	1,345	8,881	11,562
V. Persons engaged in the domestic offices, or duties of wives, mothers, mistresses of families, children, relatives	363,559	409,145	3,160	386,389
VI. Persons engaged in entertaining, clothing, and performing personal offices for man	15,587	66,840	88,176	266,311
VII. Persons who buy or sell, keep, let, or lend money, houses, or goods of various kinds	6,078	369	35,984	8,266
VIII. Persons engaged in the conveyance of men, animals, goods, and messages	24,600	153	61,055	535

Classes. Class.	Under 20 years of age.		20 years of age and upwards.	
	Males.	Females.	Males.	Females.
IX. Persons possessing or working the land, and engaged in growing grain, fruits, grapes, animals, and other products	1,261	167	13,348	2,490
X. Persons engaged about animals	1,054	3	8,810	40
XI. Persons engaged in art and mechanical productions in which matters of various kinds are employed in combination	16,600	2,791	114,476	5,332
XII. Persons working and dealing in animal matters	7,794	3,421	40,004	16,321
XIII. Persons working and dealing in matters derived from the vegetable kingdom	14,805	2,393	86,110	16,368
XIV. Persons working and dealing in minerals	6,974	259	47,058	1,531
XV. Labourers and others—branch of labour undefined	7,187	206	45,240	832
XVI. Persons of rank or property not returned under any office or occupation	122	277	7,818	25,652
XVII. Persons supported by the community and of no specified occupation	1,807	1,355	2,390	6,620
Other persons of no stated occupations or conditions	1,625	4,501	11,347	13,294

Appendix IV.

OCCUPATIONS OF MALES AND FEMALES FROM THE CENSUS OF 1891 (see p. 86).

	Males.	Females.
Total 4,211,743	1,990,748	2,220,995
CLASSES.		
Class.		
I. Persons engaged in the general or local government of the country	36,765	2,727
II. Persons engaged in the defence of the country	15,846	—
III. Persons in the learned professions (with their immediate subordinates) either filling public offices or in private practice	48,547	52,184
IV. Persons engaged in literature, the fine arts, and the sciences	24,322	10,042
V. Domestic offices and children under 10 years of age	528,162	819,121
VI. Commercial occupations — merchants, agents, clerks, &c.	101,649	7,448
VII. Bankers, brokers, finance agents, insurance service	12,078	248
VIII. Persons engaged in the conveyance of men, animals, goods, and messages	215,835	3,208
IX. Persons possessing or working the land, and engaged in growing grain, fruits, grapes, animals, and other products	12,170	1,140
X. Persons engaged about animals	1,504	159
XI. Industrial, art, and mechanical productions, in which matters of various kinds are employed in combination :—		
Books, prints, maps	50,644	11,887
Machines and implements	46,185	2,044
Building trades, furniture, &c.	158,876	9,128
Carriage and boat builders	18,677	349
Chemicals and compounds	8,034	2,470
Tobacco and pipes	6,228	4,089
Food and drink	103,937	22,963
Textiles and dress	100,312	161,518
XII. Persons working and dealing in animal matters	17,177	8,425

Classes.	Males.	Females.
Class.		
XIII. Persons working and dealing in matters derived from the vegetable kingdom....	33,291	18,677
XIV. Persons working and dealing in minerals and metals.....	71,984	3,557
XV. Dealers in general or undefined commodities.....	22,507	8,308
Labourers and others, undefined.....	104,794	12,279
XVI. Persons of rank and property not returned under any office or occupation, living on own means, pensioners	45,124	88,454
XVII. Persons engaged in refuse matters, sweeps, scavengers, &c.....	4,217	520
All others over 10 years of age.....	201,883	970,050

The pottery of London is an industry which should not be passed over among general statistics. Famous for many years at Chelsea, it is well known that pieces of old Chelsea china now realize fancy prices. A district of Kensington was known as the Potteries until quite recently. The industry has now been transferred almost exclusively to Lambeth, where Messrs. Doulton's famous ware is now manufactured. At the present time Doulton pottery takes rank on the Continent with the best examples of modern productions, and Lambeth has thus carried on the fame of Chelsea.

Appendix V.

(Page 124.)

Additional information as to the food-supply of London as it is regulated from the markets will be of interest to the reader.

In the parliamentary paper "Agriculture Returns for Great Britain", published by the Board of Agriculture, some useful information is given as to the prices of meat, &c., in London and other markets.

The average prices fetched for cattle per *live cwt.* in London and certain other large towns are shown in the following table:—

Markets.	Prime Cattle.		Second Quality.	
	1893.	1895.	1893.	1895.
	s. d.	*s. d.*	*s. d.*	*s. d.*
London	39 4	38 –	35 –	34 4
Liverpool	34 6	33 8	29 4	27 10
Newcastle	35 10	35 4	31 4	33 –
Shrewsbury	32 6	33 10	28 –	30 6
Aberdeen	37 4	36 8	33 2	32 9
Dundee	35 4	35 3	33 2	33 2
Edinburgh	36 –	35 1	33 8	34 6
Perth	35 4	35 11	33 2	33 5

The average wholesale prices of beef and mutton per lb. at the London markets, at Liverpool and at Glasgow, were:—

Markets.	Beef.		Mutton.	
	1881-85.	1895.	1881-85.	1895.
	d. d.	*d. d.*	*d. d.*	*d. d.*
Metropolitan Cattle Market	6 to 8⅝	4 to 6¼	7⅜ to 10	5⅞ to 8⅞
London Central Market...	4½ ,, 7⅛	2⅞ ,, 6¼	5 ,, 8⅞	2⅞ ,, 7⅝
Liverpool	4½ ,, 6⅞	4¼ ,, 5½	6½ ,, 8⅝	5⅛ ,, 7⅛
Glasgow	6⅛ ,, 7⅜	4⅛ ,, 6	6¼ ,, 7⅜	5¼ ,, 7⅛

The average number of animals for certain series of years brought into the Metropolitan and Deptford cattle markets distinguishing home from foreign cattle, were:—

Years.		Average number of animals.			
		Home.	Foreign.		Total.
		Metropolitan Cattle Market.	Metropolitan Cattle Market.	Deptford Cattle Market.	
Cattle	1881–85	148,983	34,279	118,877	302,139
	1886–90	160,717	32,048	121,530	314,295
	1891–94	105,319	5,601	146,560	257,480
	1895	102,645	40	150,928	253,613
Sheep	1881–85	588,298	44,828	684,594	1,317,720
	1886–90	667,071	61,192	508,607	1,236,870
	1891–94	778,109	32,577	67,722	878,408
	1895	610,470	132,270	230,202	972,942
Pigs	1881–85	602	10	16,687	17,299
	1889–90	1,933	—	9,086	11,019
	1891–94	3,555	—	—	3,555
	1895	2,972	—	2	2,974

It will be noticed from this table that the number of animals brought into London alive has decreased considerably during the last 15 years. On the other hand, there has been a corresponding increase in the quantity of killed meat imported. The actual quantity of meat delivered at the central markets cannot be separated from the quantity of poultry and provisions, but the following table will give a rough indication of this increase:—

Year.	Country-killed meat and produce.	General foreign-killed meat and produce.	American-killed fresh meat.	Australian and New Zealand-killed fresh meat.
	cwts.	cwts.	cwts.	cwts.
1881–85 ...	2,169,688	230,140	516,896	118,444
1886–90 ...	2,317,556	438,532	747,696	444,836
1891–94 ...	2,329,990	631,255	1,280,815	822,865
1895 ...	2,254,660	778,240	1,242,140	1,334,380

The total quantities of British wheat, barley, and oats returned as sold in the London market in the years 1894 and 1895, together with the average prices obtained, were as follows:—

	Quantity returned.		Average price.	
	1894.	1895.	1894.	1895.
	Qrs.	Qrs.	s. d.	s. d.
Wheat	64,831	52,338	24 3	23 11
Barley	43,397	46,976	26 8	25 11
Oats	20,464	26,255	17 2	15 5

Nearly the whole of the produce sold in the London markets is grown outside London. The total quantity of crops actually produced within the County of London is given in the following table:—

	Estimated produce.	Acreage.	Estimated average yield per acre.
	1895.	1895.	1895.
	Bushels.	Acres.	Bushels.
Wheat	5,740	205	28·00
Barley	864	27	32·00
Oats	9,672	206	46·95
Rye	—	54	—
Beans	740	37	20·00
Peas	1,385	69	20·07
	Tons.		Tons.
Potatoes	4,578	577	7·93
Turnips and Swedes	989	85	11·64
Mangolds	6,602	421	15·68
Cabbage, &c.	—	490	—
Vetches or tares...	—	201	—
Other green crops	—	1,004	—
Small fruits	—	301	—
	Cwts.		Cwts.
Hay from clover	5,345	218	24·52
Hay from permanent pasture	72,938	4,679	15·59

The total weight of fish of all kinds received in London by land and sea in 1895, and also the quantity seized as unfit for food, was as follows:—

Market.	Fish delivered.			Fish seized and condemned as unfit for food.
	By land.	By sea.	Total.	
	Tons.	Tons.	Tons.	Tons.
Billingsgate	110,820	33,069	143,889	930
Shadwell	—	27,613	27,613	121
Total	110,820	60,682	171,502	1,051

The number of boxes of salmon (each box weighing about 1 cwt.) sold at Billingsgate from 1884 to 1895 was as follows:—

Year.	Scotch.	Berwick-on-Tweed.	Irish.	English and Welsh.	Total Boxes.	Total Weight in Tons.
1884	27,219	1792	5,979	1600	39,300	1965
1885	30,362	2455	8,375	1897	46,374	2318
1886	23,407	2227	6,507	2204	37,554	1878
1887	26,907	2250	7,072	2324	42,673	2139
1888	22,859	2055	7,915	2326	39,087	1954
1889	21,101	1105	7,892	2012	34,538	1727
1890	18,931	1285	10,710	1641	34,400	1720
1891	25,889	1796	10,131	2755	42,631	2132
1892	21,919	1343	9,245	2411	37,659	1883
1893	18,903	944	6,783	2310	33,069	1653
1894	15,031	616	10,058	1677	29,900	1495
1895	25,629	1081	7,922	2533	38,721	1936

Appendix VI.—Statistics of Open Spaces (see p. 146).

Sanitary District.	Total acreage of permanent open space.	Total acreage of the whole district (excluding adjacent tidal water and foreshore).	Area of open space per cent of total area of district.	Population per acre of open space.	Population per acre of whole district.	Population per acre of part of district not open space.	Overcrowding: Proportion of inhabitants living more than two in a room, in tenements of less than five rooms, to total population.	Corrected death-rate, 1895.
							per cent.	
Central London (East)—								
Whitechapel (including Tower)....	11½	379	3·0	6,841	208	214	43·50	25·3
Shoreditch	6½	648	1·0	18,824	189	191	33·68	24·3
St. Luke.....	8¼	237	3·5	5,034	175	182	44·24	31·9
Clerkenwell	7½	380	2·0	8,827	174	178	38·78	25·0
	33¾	1,644	2·1	9,149	188	192	38·49	25·7
Central London (West)—								
Holborn (including Charterhouse, part of Furnival's Inn, Gray's Inn, part of Staple Inn).....	2	192	1·0	15,866	165	167	38·08	28·1
St. Giles (includ. Lincoln's Inn)...	8¼	252	3·3	4,637	152	157	29·80	24·8
St. Martin-in-the-Fields.....	120¼	286	42·0	109	46	79	19·82	22·4
Strand	6½	166	3·9	3,659	143	149	30·95	27·9
St. James, Westminster	¾	163	·5	30,733	141	142	23·78	19·6
	137¾	1,059	13·0	943	123	141	29·76	25·0
Central London (South)								
Newington.....	6¾	631	1·1	17,917	192	194	22·26	25·1
St. George-the-Martyr	1¼	284	·4	48,222	212	213	33·59	28·0
St. Saviour.....	4	204	2·0	6,341	124	127	32·37	27·7
St. Olave.....	3¼	125	2·6	3,610	94	96	29·10	27·6
Bermondsey	4¼	627	·7	20,112	136	137	23·30	23·3
Rotherhithe	68½	754	9·1	589	54	59	18·00	20·3
	88	2,625	3·4	3,911	131	136	25·09	24·9

Sanitary District.	Total acreage of permanent open space.	Total acreage of the whole district (excluding adjacent tidal water and foreshore).	Area of open space per cent of total area of district.	Population per acre of open space.	Population per acre of whole district.	Population per acre of part of district not open space.	Overcrowding: Proportion of inhabitants living more than two in a room, in tenements of less than five rooms, to total population.	Corrected death-rate, 1895.
							per cent.	
East London—								
St. George-in-the-East	7¾	244	3·2	6,130	195	201	39·83	29·3
Limehouse	12¾	465	2·7	4,573	125	129	25·76	29·1
Poplar	88¼	2,333	3·8	1,918	73	75	17·83	23·7
Mile-end Old Town	14	677	2·1	7,933	164	168	22·00	22·8
Bethnal Green	98¾	755	13·1	1,308	171	197	34·23	22·4
	221½	4,474	5·0	2,326	115	121	25·78	24·3
North London—								
Hackney	618½	3,299	18·7	344	65	79	10·83	18·6
Stoke Newington	24¼	638	3·8	1,381	52	55		15·3
Islington	40½	3,109	1·3	8,315	108	110	20·25	18·5
St. Pancras	291½	2,672	10·9	826	90	101	27·62	21·4
Hampstead	318¼	2,248	14·2	237	34	39	10·32	14·5
St. Marylebone	372¼	1,506	24·7	379	94	125	26·78	21·7
	1,665¼	13,472	12·4	625	77	88	20·06	19·2
West London—								
Paddington	132½	1,256	10·5	940	99	111	16·81	18·5
St. George, Hanover Square	282	1,117	25·2	284	72	96	11·11	16·3
St. Margaret and St. John (including St. Peter)	313¾	823	38·1	171	65	105	20·85	24·1
Chelsea	20¾	794	2·6	4,658	122	125	18·58	21·2
Kensington	11½	2,188	·5	14,823	78	78	17·26	18·0
Hammersmith	242¼	2,286	10·6	430	46	51	13·44	18·7
Fulham	44	1,701	2·6	2,586	67	69	14·49	20·9
	1,046¾	10,165	10·3	710	73	82	16·07	19·3

Sanitary District.	Total acreage of permanent open space.	Total acreage of the whole district (excluding adjacent tidal water and foreshore).	Area of open space per cent of total area of district.	Population per acre of open space.	Population per acre of whole district.	Population per acre of part of district not open space.	Overcrowding: Proportion of inhabitants living more than two in a room, in tenements of less than five rooms, to total population.	Corrected death-rate, 1895.
							per cent.	
South-west London—								
Wandsworth	1,163¼	9,285	12·5	161	20	23	5·57	16·1
Battersea	407	2,169	18·8	406	76	94	14·20	19·0
	1,570¼	11,454	13·7	224	31	36	9·80	17·5
South London—								
Lambeth	115¾	3,941	2·9	2,549	75	77	15·87	20·1
Camberwell	216¾	4,450	4·9	1,168	57	60	11·10	19·6
	332½	8,391	4·0	1,648	65	68	13·67	19·9
South-east London—								
Greenwich	310½	3,425	9·1	566	51	56	11·17	19·5
Woolwich	70	1,126	6·2	590	37	39	14·45	20·5
Plumstead	233¾	3,388	6·9	253	17	19	6·43	16·1
Lee	172¼	7,006	2·5	224	6	6		15·9
Lewisham	259¾	6,543	4·0	402	16	17	3·59	15·3
	1,046¼	21,488	4·9	401	20	21	8·62	17·7
Total for the County	6,142	74,772	8·2	717	59	64	19·57	20·8

Appendix VII.

(See p. 169.)

I have not been able to describe the underground sewerage works of London, the finest in the world, but the following statistics will convey some idea of the magnitude of the drainage works; they relate to the main sewers and works, and there are the local sewers besides:—

North Side of the Thames.

	Length.	Diameter.
Northern High-Level Sewer	...7½ miles	...from 4 feet to 9½ feet by 12 feet.
Northern Middle-Level Sewer	...9½ ,,	...from 4½ feet by 3 feet to 10½ feet.
Piccadilly Branches	...2¾ ,,	...
Northern Low-Level Sewer	...8¼ ,,	...from 6¾ feet to 10¼ feet.
Hackney Branch ...	...2½ ,,	...
Isle of Dogs Branch	...1⅞ ,,	...
Western Sewers—Main Line	...5⅛ ,,	...from 4 feet by 2 feet to 5 feet.
Fulham Branch ...	...1⅓ ,,	...
Acton Line... ...	...1⅜ ,,	...
Northern Outfall Sewer...	...5½ ,,	...Two culverts, each of 9 feet diameter.

Abbey Mills Pumping Station—8 engines, each of 142 horse-power, capable of raising 15,000 cubic feet of sewage per minute to a height of 36 feet.

Western Pumping Station at Pimlico—4 engines, each of 90 horse-power, with a supplementary engine of 120 horse-power, capable of raising 6000 cubic feet of sewage per minute to a height of 18 feet.

Reservoir at Barking Creek—Area of 9½ acres.

South Side of the Thames.

	Length.	Diameter.
Southern High-Level Sewer	...5⅜ miles	...from 4½ by 3 feet to 10½ feet.
Effra Branches do....	...7¼ ,,	...from 7 feet to 10½ feet.
Southern Low-Level Sewer	...9½ ,,	...from 4 feet to 2 culverts, each of 7 feet.
Bermondsey Branch	...2¾ ,,	...from 5 feet to 5½ feet.
Southern Outfall Sewer...	...7½ ,,	...11½ feet.

Deptford Pumping Station—4 engines, each of 125 horse-power, capable of raising 13,000 feet of sewage per minute to a height of 18 feet.

Crossness Pumping Station—4 engines, each of 125 horse-power, capable of raising 17,000 cubic feet of sewage per minute to a height of 10 to 30 feet.

Crossness Reservoir—Area of 6½ acres.

The total length of the main intercepting sewers is about 82 miles; they are capable of intercepting daily 63 million cubic feet, or nearly 400 million gallons of sewage, and the total cost of the works has been about £7,800,000.

The following is the quantity of sewage pumped at the several stations 1893 to 1895:—

Pumping Station.	Sewage pumped (in million gallons).		
	1893.	1894.	1895.
Abbey Mills	24,429¼	26,482½	26,303⅜
Western	9,005⅜	9,627⅜	9,734⅝
Crossness	26,574¼	28,345⅝	29,289⅛
Deptford	17,861¾	18,946	19,817

The quantities chemically treated at the outfall stations in 1895–96 were:—

Northern (Barking)	46,938 million gallons.	
Southern (Crossness)	31,457	,,

And the quantity of sludge sent out to sea and discharged several miles off the coast was:—

Northern (Barking)	1,412,000 tons.	
Southern (Crossness)	772,500	,,

These enormous quantities give some indication of the importance of these operations to the health of London, seeing that they have been intercepted from their natural discharge into the Thames and Lea rivers.

Appendix VIII.

LONDON RAILWAYS, WITH DATE OF INCORPORATION AND OTHER PARTICULARS (see page 173).

London and South-Western Railway Company, 1834, from London to Southampton, Portsmouth, Dorsetshire, Devonshire, and Cornwall, with terminus at Waterloo. This Company incorporated the original London and Southampton Company of 1834.

Great-Western Railway Company, 1835, London to Penzance in the South, Birkenhead in the North, and New Milford in the West, with terminus at Paddington.

South-Eastern Railway Company, 1836, from London to Dover, Folkestone, and through Kent, with terminus at Charing Cross.

London, Brighton, and South-Coast Railway Company, 1837, from London to Brighton, with termini at London Bridge and Victoria. This Company incorporated the London and Croydon Railway Company of 1835.

Midland Railway Company, 1844, from London to Carlisle, with terminus at St. Pancras.

London and North-Western Railway Company, 1846, from London to Carlisle and the North, with terminus at Euston. This Company incorporated the original London and Birmingham Railway Company, first opened in 1838.

Great Northern Railway Company, 1846, London to Yorkshire and the North, with terminus at King's Cross.

London, Tilbury, and Southend Railway Company, 1852, from London to Southend and Shoeburyness, with terminus at Fenchurch Street.

London, Chatham, and Dover Railway Company, 1853, from London to Kent, with terminus at Victoria.

Great-Eastern Railway Company, 1862, London to Norfolk, Suffolk, and Essex, with terminus at Liverpool Street.

Great Central Railway Company, 1849, extension to London, 1893, now being constructed, with a terminus in Marylebone Road.

LOCAL LINES.

London and Greenwich Railway Company, 1833, from London Bridge to Greenwich, 3¾ miles. The line is leased to the South-Eastern Railway Company.

London and Blackwall Railway Company, 1836, from Fenchurch Street to Millwall Docks, 7 miles 25 chains.

West London Railway Company, 1836, from Wormwood Scrubs, *via* Uxbridge Road, to West Brompton, 3½ miles.

North London Railway Company, 1846, from near Chalk Farm Station *via* Canonbury, Hackney, Bow, to Poplar, with a branch from Dalston to Broad Street.

Metropolitan Railway Company, 1853, from South Kensington to Aldgate, *via* King's Cross, with branches from Edgware Road to Bishop's Road, and Baker Street to Aylesbury.

Hammersmith and City Railway Company, 1861, from Westbourne Park to Hammersmith, 3 miles.

Metropolitan District Railway Company, 1864, from Kensington High Street to Cannon Street, with extensions to Ealing, Fulham, Hammersmith, and Hounslow.

East London Railway Company, 1865, from Liverpool Street to New Cross, 5 miles 54½ chains.

City and South London Railway, 1884, from King William Street, City, to Clapham Common, 4 miles, underground.

Waterloo and City Railway Company, 1893, from Launcelot Street, Lambeth, to Mansion House Street, City, under the River Thames, 1 mile 4 furlongs.

Central London Railway, from Shepherd's Bush Green to Liverpool Street, 6½ miles, underground, now in course of construction. There will be 14 stations and the line will be worked by electric motive power.

Appendix IX.

(See page 201.)

The Times, writing on the subject of local government in London on 20th March, 1855, used these words:—

"We may really say that there is no such place as London at all, the huge city passing under this title being rent into an infinity of divisions, districts, and areas. . . . Within the metropolitan limits the local administration is carried on by no fewer than 300 different bodies, deriving powers from about 250 different local Acts, independent of general Acts. The number of commissioners employed, though not precisely ascertainable, Sir Benjamin Hall estimates by his own computation at about 15,000."

There does not appear to be much improvement under the present state of things, as the reader may judge by comparing the details given in the text.

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